

RECORD OF DECISION

Grasse River Superfund Site
(a.k.a. Alcoa Aggregation Site)
Massena, St. Lawrence County, New York

United States Environmental Protection Agency
Region II
New York, New York
April 2013

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PART 1 DECLARATION

SITE NAME AND LOCATION

Grasse River Superfund Site (a.k.a. Alcoa Aggregation Site)
Massena, St. Lawrence County, New York

Superfund Site Identification Number: NYD980506232

STATEMENT OF BASIS AND PURPOSE

This Record of Decision (ROD) documents the U.S. Environmental Protection Agency's (EPA's) selection of a remedy for the Grasse River Superfund site (Site), in Massena, New York, which was chosen in accordance with the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, 42 U.S.C. §§ 9601-9675 and, to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. Part 300. This decision document explains the factual and legal basis for selecting a remedy to address contamination at the Site. The attached index (see Appendix III) identifies the items that comprise the Administrative Record upon which the selected remedy is based.

The New York State Department of Environmental Conservation (NYSDEC) was consulted on the proposed remedy in accordance with CERCLA § 121(f), 42 U.S.C. § 9621(f), and concurs with the selected remedy (see Appendix II).

The St. Regis Mohawk Tribe (SRMT), a support agency for the Site, was consulted on the selected remedy, which calls for dredging and backfilling to grade of the polychlorinated biphenyl (PCB)-contaminated near shore areas of the Grasse River, and the capping of PCB-contaminated sediment in the main channel of the river. The SRMT agrees with the near shore component of the selected remedy, but prefers the removal of PCB-contaminated sediments from the main channel of the river and therefore, does not agree with the selected remedy.

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response action selected in this ROD, may present an imminent and substantial endangerment to public health, welfare, or the environment.

DESCRIPTION OF THE SELECTED REMEDY

The response action in this ROD represents the only planned remedial phase or operable unit at the Site and actively addresses the contaminated sediment by utilizing a combination of removal and containment technologies. The major components of the selected remedy include the following:

- Dredging of near shore sediment between river transects¹ T1 and T21 with sediment PCB concentrations greater than or equal to 1 milligram per kilogram (mg/kg) on a segment length weighted average (SLWA) or maximum surface² concentration basis, followed by backfill to grade;
- Dredging of near shore sediment between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade;
- Placement of an armored cap over the main channel sediments between T1 and T21 where either the SLWA or the maximum surface sediment PCB concentration is greater than or equal to 1 mg/kg. During design, the composition and thickness of the capping material will be optimized to promote reliability and efficacy of the cap;
- Placement of a main channel cap over sediments between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg. During design, the composition and thickness of the capping material will be optimized to promote reliability and efficacy of the cap;
- Within the near shore area targeted for dredging, the goal is to remove all of the PCB-contaminated sediments within these areas, leaving a residual of less than 1 mg/kg;
- Backfill, capping, and habitat material will be clean material. Acceptance criteria for clean backfill quality are that no organic contaminants shall be detected using the analytical methods identified in Section 12 (Selected Remedy) of this document, and concentration of inorganics shall be below Site-specific local background levels or will meet the lowest effects level [LEL] of NYSDEC's sediment criteria for inorganics³.
- Treatment of process water from the sediment dewatering facilities to meet NYSDEC discharge limits;
- A Phase 1A Cultural Resources Survey will be conducted during the pre-remedial design prior to any disturbance and/or in-river work;
- Additional sampling and analysis of the relatively small area of floodplains present along the river will be performed concurrent with the design phase of the project to determine if additional actions are warranted in any of the floodplain areas;
- Monitoring (during remedial construction and long-term) data will be collected and/or reviewed to demonstrate the effectiveness of the remedy in meeting the RAOs (see Section 9.2 Common Elements for more monitoring details). Monitoring will include the Massena Power Canal;

¹ For purposes of the investigation, the Site was divided by transects (T) where each transect represented one-tenth of a mile. In most of the Site reports the river is divided into 72 transects (T1 through T72).

² The surface sediment is defined as the top 6 inches in the main channel and the top 12 inches in the near shore sediment.

³ NYSDEC's sediment criteria for inorganics can be found in Table 2 of the NYSDEC Technical Guidance for Screening Contaminated Sediments.

- Air monitoring to ensure that remedy implementation is protective;
- Institutional controls in the form of informational devices to limit exposure to PCBs. EPA is relying on existing New York State Department of Health (NYSDOH) fish consumption advisories. NYSDOH periodically reviews fish PCB data to ensure the advisories are up to date and considers whether the fish consumption advisories need modification. Other informational devices would include outreach programs to inform the public to limit activities that could compromise the integrity of the cap (such as dredging) and to promote knowledge of and voluntary compliance with the fish consumption advisories;
- Development of a habitat reconstruction plan. The objective of the habitat reconstruction plan will be to identify impacts to habitat and species from the remedy, identify habitat re-establishment goals, provide design specifications for habitat recovery, and provide the scope for monitoring of habitat recovery. The plan will be developed and implemented during design and remedy implementation, will consider habitat and species management goals such as those stated in the NYS Comprehensive Wildlife Conservation Strategy, and will include the following components (see Section 12 Selected Remedy for more details):
 - Habitat assessment study for affected species will be conducted to assess the river for habitats that are present and use of the habitats by aquatic and semi-aquatic species;
 - Identification of habitat recovery material over capped areas and/or return to grade;
 - Design for restoration of vegetation; and,
 - Monitoring habitat and biota recovery.

This remedy includes 59 acres of armored cap, approximately 225 acres of main channel cap, removal of approximately 109,000 in-situ cubic yards (cy) of sediment in the near shore, and backfill of approximately 41 acres to grade. Most of the dredged material (up to about 100,000 cy) would be disposed of in the on-site permitted Secure Landfill. During design, the design team will evaluate the feasibility of expanding the on-site Secure Landfill to accommodate approximately 9,000 additional cy of dredged material. The design team also will consult with the appropriate state and federal permitting authorities regarding substantive requirements for such expansion. In the event that it is not feasible to expand the existing on-site landfill, the additional 9,000 cy of dredged material will be disposed of at an off-site permitted Toxic Substances Control Act (TSCA) and/or Resource Conservation and Recovery Act (RCRA) landfill.

Based on current information, the estimated 59-acre main channel area where armored capping will be required extends from T1 to T21. However, additional areas including those in the vicinity of T35, T37, T46, and any other areas where evidence of periodic high energy has been observed in cores will be evaluated to determine whether these areas may require a more robust cap than a 12-inch sand/topsoil main channel cap. As with all areas of remediation, the

dredging and capping components will be optimized during remedial design in order to maximize immediate risk reduction and long-term effectiveness.

Based on anticipated dredge material production rates, the current estimated construction period will extend over four construction seasons and include dredging, backfilling, and capping. It is anticipated that it will take two years for remedial design and mobilization, so that dredging may begin in 2015. Prior to construction, a remedial design will be developed that specifies details regarding the construction and implementation of the remedy. Design plans will include Site health and safety measures for the workers and a Community Health and Safety Plan for the surrounding community. A habitat assessment will also be conducted during the design. Habitat will be reconstructed during implementation of the remedy in accordance with the site-specific habitat reconstruction plan.

After construction is completed, the selected remedy relies on the implementation of institutional controls, long-term monitoring, and sedimentation to support the remedy. EPA is relying on existing NYSDOH fish consumption advisories. NYSDOH periodically reviews fish PCB data to ensure the advisories are up to date and considers whether the fish consumption advisories need modification. Other informational devices would include outreach programs to inform the public to limit activities that could compromise the integrity of the cap (such as dredging) and to promote knowledge of and voluntary compliance with the fish consumption advisories.

If monitoring reveals any portion of the various caps has been eroded, damaged areas will require maintenance/replacement. If any portion of a capped area has been eroded, monitoring and sampling will determine whether other areas have been contaminated with PCBs released from the damaged areas. Additional enhanced capping may be required to cover any areas where sampling shows surface sediment PCB concentrations greater than or equal to 1 mg/kg. Monitoring will also be conducted to measure the success of habitat re-establishment. A review of site conditions will be conducted at least once every five years, as required by CERCLA since contamination will remain on Site at levels that do not allow for unlimited use and unrestricted exposure.

The environmental benefits of the selected remedy may be enhanced by consideration, during the design, of technologies and practices that are sustainable in accordance with EPA Region 2's Clean and Green Energy Policy and NYSDEC's Green Remediation Policy⁴. This will include consideration of green remediation technologies and practices.

DECLARATION OF STATUTORY DETERMINATIONS

The selected remedy meets the requirements for remedial actions set forth in CERCLA § 121, 42 U.S.C. § 9621, in that it: 1) is protective of human health and the environment; 2) meets a level or standard of control of the hazardous substances, pollutants, and contaminants which at least attains the legally applicable or relevant and appropriate requirements under federal and state laws (unless a statutory waiver is justified); 3) is cost-effective; and 4) utilizes permanent

⁴ See http://epa.gov/region2/superfund/green_remediation and http://www.dec.ny.gov/docs/remediation_hudson_pdf/der31.pdf.

solutions and alternative treatment (or resource recovery) technologies to the maximum extent practicable. In addition, CERCLA includes a preference for remedies that employ treatment that permanently and significantly reduce the volume, toxicity or mobility of hazardous substances as a principal element (or justify not satisfying the preference). For the Grasse River Site, EPA does not believe that treatment of the sediments is practicable or cost effective given the widespread nature of the sediment contamination and the high volume of sediment that is being addressed.

Because this remedy will result in hazardous substances, pollutants, or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of remedial action to ensure that the remedy is, or will be, protective of human health and the environment.

DATA CERTIFICATION CHECKLIST

The following information is included in the Decision Summary section of this ROD. Additional information can be found in the Administrative Record for this Site.

- ✓ Chemicals of concern and their respective concentrations - pages 7-10;
- ✓ Remediation goals for PCB concentrations in fish - page 25;
- ✓ Baseline risk represented by PCBs - pages 12-24 and Tables 7-1 through 7-9;
- ✓ Action levels established for PCBs and the basis for these levels - page 29;
- ✓ How the selected remedy addresses sediment that constitutes principal threats - page 49;
- ✓ Current and reasonably anticipated future land use assumptions and current and potential future uses of river used in the baseline risk assessment - pages 11-24;
- ✓ Estimated capital, operation and maintenance, and total present-worth costs; discount rate; and the number of years over which the remedy cost estimates are projected - pages 35, 47, and 48 and Table 12-1; and,
- ✓ Key factors that led to selecting the remedy (*i.e.*, how the selected remedy provides the best balance of tradeoffs with respect to the balancing and modifying criteria, highlighting criteria key to the decision) - pages 53-55.

AUTHORIZING SIGNATURE



Walter E. Mugdan, Director
Emergency and Remedial Response Division

APRIL 4, 2013

Date

**RECORD OF DECISION FACT SHEET
EPA REGION II**

Site name: Grasse River Superfund Site (a.k.a. Alcoa Aggregation Site)

Site location: Massena, St. Lawrence County, New York

HRS score: Not Applicable

Listed on the NPL: Non-NPL site

Record of Decision

Date signed: April 4, 2013

Selected remedy: Dredge contaminated sediment from the near shore (T1-21) where either the SLWA or the maximum surface sediment PCB concentration is equal to or greater than 1 mg/kg; dredge contaminated near shore sediment (T21-T72) with PCB concentrations equal to or greater than 1 mg/kg, backfill the dredged near shore areas to grade, armor cap T1-T21 main channel sediment where either the SLWA or the maximum surface sediment PCB concentration is greater than or equal to 1 mg/kg, cap T21-T72 main channel sediment where the maximum surface sediment PCB concentration is greater than or equal to 1 mg/kg, on-site disposal of dredged sediments, debris, off-site disposal if insufficient capacity on-site, and treatment of dredging and processing generated water to meet NYSDEC discharge limit prior to discharge into the Grasse River.

Capital cost: \$165,240,123

Annual O&M cost: \$951,000

Present-worth cost: \$243,136,173⁵

Lead

Site is enforcement lead: EPA is the lead agency

Primary contact: Young S. Chang, Remedial Project Manager, (212) 637-4253

Secondary contact: Pietro Mannino, Chief of Western New York Remediation Section,
(212) 637-4287

Main PRP: Alcoa Inc.

Waste

Waste type: Polychlorinated Biphenyls (PCBs)

Waste origin: Wastewater containing PCBs discharged from Alcoa Massena West Plant through outfalls

Contaminated media: Sediment and surface water

⁵ Total Present Worth Cost includes "Routine Engineering Design" (15%) and "Construction Contingency" (25%).

PART 2 DECISION SUMMARY

1. SITE NAME, LOCATION, AND DESCRIPTION

The Grasse River Superfund Site (Site), also known as the Alcoa Aggregation Superfund Site, is located along the northern boundary of New York State in Massena and near the Canadian border. The Site is adjacent to the Village of Massena, with a population of approximately 11,000 (Census 2010). The Site is not on the National Priorities List (NPL), but is being investigated and remediated as an enforcement-lead remedial action that follows the same investigation and remedy selection requirements as sites on the NPL. EPA issued an Administrative Order to Alcoa Inc. (Alcoa) in September 1989, calling for the investigation of the Alcoa Study Area to determine the nature and extent of hazardous substances contamination. The Alcoa Study Area includes approximately 7.2 miles of the lower Grasse River from the intersection of the Massena Power Canal (Power Canal) and the Grasse River, to the confluence of the Grasse and St. Lawrence Rivers. This 7.2 mile stretch of the Grasse River is referred to as the “Site” for purposes of this Record of Decision. The Alcoa Study Area also includes the approximately 1.3 miles of the Lower Grasse River upstream of the confluence of the Grasse River and the Power Canal, Robinson Creek (which discharges to the St. Lawrence River) and the Unnamed Tributary (see Figure 1 Site Location Map).

The Alcoa Massena-West Plant (Alcoa West Facility) is located on the north shore of the lower Grasse River, east of the Power Canal, and is bounded to the north by the St Lawrence River. Two other large manufacturing facilities, the Alcoa Massena-East Plant (formerly Reynolds Metals Company (RMC)) and the former General Motors Central Foundry Division (GM) plant are located within two miles east of the confluence of Grasse and St. Lawrence Rivers⁶ (see Figure 1). The United States maintains that Akwesasne, the Mohawk territory of the federally-recognized Saint Regis Mohawk Tribe (SRMT), as described in the 1796 Treaty with the Seven Nations of Canada, 7 Stat. 55, includes land on both banks of the lower Grasse River, as well as land located along the St. Lawrence River downstream of the Site, together known as the Indian Meadows.

The Power Canal, constructed between 1898 and 1903, connects the Massena Intake Dam on the St. Lawrence River to the former Power Dam at the Power Canal/Grasse River confluence. The lower Grasse River was significantly deepened in the early 1900s by the Aluminum Company of America (now Alcoa) to accommodate discharge from the Power Canal. The discharge had enough energy to prevent significant sediment deposition until the 1950s when the Power Canal was taken out of service; as a result, the river became much more quiescent and sediments began to accumulate. The power generation from the Power Canal stopped operation when the joint U.S. and Canadian development project of the St. Lawrence River completed the construction of the Eisenhower Locks System and of the Moses-Saunders Power Dam (FDR Project), which began supplying hydroelectric power in 1958.

Alcoa’s past production processes generated various waste materials, including hydraulic oils that contained polychlorinated biphenyls (PCBs). In the 1950s, coincident with the Power Canal being taken out of service, Alcoa began using and discharging PCBs through outfalls to the

⁶ Reynolds Metals Co. and General Motors-Central Foundry Division, including sediment in the St. Lawrence River are also Superfund sites at in which EPA is overseeing the cleanups under CERCLA.

Grasse River, the Power Canal, and the Unnamed Tributary. As a result of these past disposal practices, the Site sediment and water are contaminated with PCBs.

2. SITE HISTORY AND ENFORCEMENT ACTIVITIES

The 2,700-acre Alcoa West Facility is an aluminum production and fabrication plant that has been in operation since 1903. The facility is located east of the Power Canal and north of the lower Grasse River. Alcoa's past waste generation and disposal practices resulted in PCBs accumulating in sediment that became deposited primarily on top of bedrock and/or hard glacial till in the river. PCB discharges to the lower Grasse River decreased significantly after Alcoa stopped using PCBs in the mid-1970's, and as a result the sediment deposited in the lower Grasse River since that time has contained lower PCB concentrations than the sediments that were deposited before Alcoa stopped using PCBs. Storm water and treated wastewater from the Alcoa facility are discharged from permitted outfalls that flow into the lower Grasse River, the Power Canal, the Unnamed Tributary, and Robinson Creek. Historically, PCBs also were released into the river through these outfalls.

As a result of these past disposal practices, NYSDEC determined that environmental conditions arising from hazardous waste disposal at the facility gave rise to significant threats to human health and the environment. Under a 1985 NYSDEC Order, Alcoa conducted a land-based cleanup program from 1991 to 2001, which included the elimination or mitigation of sources of contamination to the Grasse River. Concurrently with the land-based cleanup program, Alcoa made several site improvements in relation to its State Pollution Discharge Elimination System (SPDES) permit. Upland based efforts included: remediation of 18 separate disposal areas, including 37 acres of landfills and 100 acres of lagoons; construction of Alcoa's on-site Secure Landfill to dispose of excavated material; remediation of the Unnamed Tributary; and, cleaning of underground utilities that are part of the stormwater/wastewater collection system. Through these efforts, Alcoa has significantly reduced its discharges and controlled the upland sources of PCBs to the Site.

The original sources of the PCB contamination in the lower Grasse River were the discharges from the Alcoa plant outfalls. The Alcoa West Facility presently has five permitted outfalls that discharge stormwater and treated wastewater; three discharge to the lower Grasse River, one to the Power Canal, and one to Robinson Creek. Outfall 001 is the main plant outfall. PCB discharges from this outfall have declined from 60 grams per day (grams/day) in 1990 to 1.9 grams/day in 1999 to 0.8 grams/day in 2003; since 2004, PCBs have not been detected in the outfall samples with the exception of a one-time detection of 0.08 micrograms per liter ($\mu\text{g/L}$) in 2009.

Although plant facility discharges were important contributors to lower Grasse River PCBs in the past, upland remediation efforts completed in 2001 have significantly reduced PCB discharges to the river. However, small but measurable discharges under Alcoa's SPDES permit continued to occur until 2003 when Alcoa conducted additional work under a NYSDEC order to further reduce the PCB discharges from Outfall 001. The PCB-containing sediments in Unnamed Tributary were removed in 1998, significantly decreasing continued contaminant inputs from this historical source of PCBs to the lower Grasse River. PCB data collected from

several shallow and deep groundwater monitoring wells, coupled with the limited discharge rate, indicate that groundwater is not a significant source of PCBs to the lower Grasse River.

Alcoa's early investigation of the Site under the terms of the 1989 EPA Administrative Order identified significantly elevated PCB concentrations in an area of Grasse River sediment located adjacent to wastewater Outfall 001. As a result, EPA amended the Administrative Order in May 1995 to require Alcoa to conduct a Non-Time-Critical Removal Action (NTCRA) to address the PCB-contaminated sediment within a one-acre area around the outfall (see Figure 2 Locations of Lower Grasse River Pilot/Demonstration Projects). Alcoa conducted the NTCRA under the amended Administrative Order between July and September, 1995. Hydraulic dredging was used to remove most of the sediments, which were dewatered and disposed of in Alcoa's TSCA and RCRA-permitted, double-lined, on-site Secure Landfill. Approximately 3,000 cy of sediment, boulders and debris were removed, which represented about 20 percent (8,000 pounds (lbs)) of the total PCB mass in the river. However, it was not possible to remove all of the PCB-contaminated sediments in this area, due mainly to the presence of cobbles and boulders on the river bottom.

Because in-place capping of contaminated sediments was one remedial technology under consideration, Alcoa conducted a capping pilot study (CPS) with EPA oversight between July and October 2001. The study involved the placement of clean cap material over a seven-acre area in a 750-foot stretch of the river about one mile downstream of Outfall 001 (see Figure 2). Several different cap designs with various cap materials and placement techniques were used. The CPS demonstrated that a cap could be constructed successfully in the lower Grasse River without significant mixing of the cap material with the underlying sediment or causing PCB releases to the water column. However, the targeted cap thickness could not always be achieved on the steep side slopes in the area of the pilot study. Monitoring after the first year showed that the cap thickness remained stable in the main channel.

During post-placement monitoring of the CPS, it was discovered that an "ice jam" event in 2003 scoured sediment in the river to a depth of up to four feet, including erosion of parts of the cap material and underlying contaminated sediment. The ice jam was an accumulation of ice in the river channel that caused higher flow rates under the ice jam toe, which resulted in some localized scour of the river bottom. Prior to the 2003 ice jam event, the occurrence of scour from ice jams was not known to the project team and therefore the CPS had not been designed to withstand such great forces. As a result, further investigation was initiated in 2003, which revealed that severe ice jam events can cause scouring of the river bottom sediments in the upper 1.8 miles of the lower river (upstream of transect T19). Through several lines of evidence, the project team discovered that ice jam events severe enough to cause measureable scour have occurred in the upper 1.8 miles of the lower Grasse River at least four times over the past 40 to 50 years.

Based on an updated conceptual site model, Alcoa performed a Remedial Options Pilot Study (ROPS) with EPA oversight in 2005. The ROPS (see Figure 2) included a one-acre armored cap, 24,400 cy (approximate) of main channel dredging, 1,600 cy of near shore dredging/backfilling to grade, and one-half an acre of thin-layer (3 to 6 inches) capping in the southern near shore area. Extensive monitoring was conducted during and following implementation. The study revealed that dredging in the main channel of the Site was difficult due to the presence of cobbles

and boulders and irregular river bottom conditions. During the ROPS, hydraulic (horizontal auger) dredging equipment was used in the main channel most of the time. For a shorter duration Alcoa tested a mechanical clamshell dredge and a swinging ladder cutterhead hydraulic dredge. Regardless of type of equipment used for dredging in the main channel during the ROPS, residual sediments contained high PCB concentrations and required capping after dredging. The study also revealed that the typical main channel sediment profile contains the highest PCB concentrations at the lowest depth of the sediment column. This most highly contaminated sediment is present over bottom materials such as bedrock, glacial till, and/or marine clay which prevent over-dredging, thereby resulting in PCB residuals with high PCB concentrations that require capping even after an extensive dredging effort. However, these conditions were not present in the northern near shore area, where mechanical (clamshell bucket) dredging was much more successful because conditions allowed for more complete removal of contaminated sediments. The ROPS also demonstrated the placement of thin layer capping over part of the southern near shore. Post-placement monitoring discovered some areas where the thin layer cap material was absent, which was attributed to placement of insufficient fill during cap installation. A 25-inch armored cap consisting of sand/topsoil, gravel, and armor stone was successfully placed (and is still intact) over a one-acre area in the main channel.

In the fall of 2006, an activated carbon pilot study (ACPS) was conducted in a 0.5-acre area to evaluate the ability to deliver activated carbon to in-river sediments and the effectiveness of activated carbon in reducing the bioavailability of PCBs to biota. The ACPS demonstrated that activated carbon can be successfully applied into the river sediments. No measurable changes in the water column PCBs were observed adjacent to or downstream of the pilot area, with only minor increases in total suspended solids (TSS) measured. Post-construction monitoring revealed that the placed carbon is stable in the fine sediments.

3. COMMUNITY PARTICIPATION

As part of the on-going community involvement program, community members, and local, state, tribal and federal government representatives have participated in a Community Advisory Panel that was formed to serve as a forum for the exchange of project-related information and to create opportunities for the community to express its interests and concerns regarding the Site. Their participation and contributions to the Site investigation and remediation process benefit the Agency in achieving its goal of effectively protecting human health and the environment. Public interest in the Site has remained high.

The Comprehensive Characterization of the Lower Grasse River (CCLGR) report and the Addendum to CCLGR report which make up the remedial investigation report, the Analysis of Alternatives (AofA) report (which is equivalent to a feasibility study report), and Proposed Plan for the Site were released to the public for comment on September 28, 2012. These documents were made available to the public in the administrative record file at the Superfund Records Center in the EPA Region 2 New York City office, the information repositories at the Massena Public Library in Massena, New York, and at the Akwesasne Library and the SRMT-Environment Division Office in Akwesasne. The notice of availability for the above-referenced documents and announcement of public information sessions and public meeting dates, times, and locations was published in *Indian Time* on October 4, 2012, in the *Daily Courier Observer*

on October 4, 2012, and in the *Watertown Daily Times* on October 7, 2012. A news release announcing the Proposed Plan, which included the public information session and public meeting dates, times, and locations, was issued to various media outlets on October 1, 2012. In addition, EPA mailed a letter to river residents in the project area notifying them of the availability of the above-referenced documents and encouraging participation in the scheduled information sessions and public meetings. The public comment period for EPA's proposed cleanup plan initially was scheduled to run through November 15, 2012.

After setting up at the St. Regis Mohawk School in Akwesasne for the 1 p.m. October 29, 2012, public information session, EPA staff was informed that the Tribal Council had declared a "State of Emergency" and that, due to the impending weather, the Council had cancelled the public meeting scheduled that evening at the St. Regis Mohawk Office for the Aging in Akwesasne. Later that day, the EPA Region 2 Regional Administrator decided to cancel the next day's scheduled public information session and public meeting in Massena, NY, also due to impending inclement weather from Hurricane Sandy.

The public information sessions and public meetings were rescheduled, and notices announcing the new dates, times, and locations for the availability sessions and public meetings were published in *Indian Time* and the *Daily Courier Observer* on November 8, 2012, and in the *Watertown Daily Times* on November 11, 2012. A news advisory announcing the rescheduled meeting dates, times, and locations was issued to various media outlets on November 5, 2012. In addition, EPA mailed a letter to river residents in the project area on November 1, 2012 notifying them of the rescheduled meeting information. The notice, news advisory and letter also announced the extension of the public comment period through November 29, 2012.

On November 14, 2012, EPA conducted a public information session in the afternoon at the Massena Town Hall and a public meeting in the evening at the Massena Central High School auditorium in Massena, NY, to inform local officials and interested citizens about the Superfund process, to review current and planned remedial activities at the Site, to discuss the Proposed Plan, and to listen to and respond to questions and comments from the area residents and other interested parties. Likewise, on November 15, 2012, EPA conducted a public information session in the afternoon at the St. Regis Mohawk School and a public meeting that evening at the St. Regis Mohawk Office for the Aging in Akwesasne.

As noted above, public meetings and public information sessions were held to provide information regarding the Site investigations, the alternatives considered, and the preferred remedy, as well as to receive public comments. At the public meetings, EPA gave a formal presentation of the Superfund process, history, investigation results, preferred remedy and other cleanup options for the Site. The public information sessions were less formal, with no detailed presentations; however, the public was given a chance to receive printed information and ask questions regarding the Site and the cleanup options of EPA, NYSDEC, NYSDOH, and SRMT representatives on a one-on-one basis.

Responses to the questions and comments received at the two public meetings and in writing during the public comment period are included in the Responsiveness Summary (See Appendix II).

4. SCOPE AND ROLE OF RESPONSE ACTION

The NCP, 40 C.F.R. Section 300.5, defines an operable unit as a discrete action that comprises an incremental step toward comprehensively addressing a site's problems. A discrete portion of a remedial response eliminates or mitigates a release, a threat of release, or pathway of exposure. The cleanup of the site can be divided into number of operable units, depending on the complexity of the problems associated with the site. Cleanup of the Site is being addressed in a single operable unit.

This ROD describes the comprehensive long-term remediation plan for the Site and is expected to be the only ROD issued to address PCB-contaminated sediments at the Site. The primary objective of this action is to reduce risks to human health and the environment due to PCB-contaminated sediments in the lower Grasse River. Removal, capping, and sedimentation over time of these sediments will reduce PCB concentrations in biota including fish tissue, thereby reducing potential human health and ecological risks. In addition, remediation of the sediment will control the source of PCBs to the water column which contributes to fish tissue concentrations, and minimize transport of PCBs downstream into the St. Lawrence River. The fish consumption advisories will continue to provide some measure of protection of human health until PCB concentrations in fish are reduced to the point where they can be relaxed or lifted.

An important early step in sediment cleanup is source control, and the selected remedy recognizes that source control measures have been implemented at the Alcoa West Facility. The source control measures include upland source control for the Site that has been completed under a NYSDEC order, as described above in Section 2 (Site History and Enforcement). In addition, PCB discharges from Alcoa's outfalls have largely been eliminated, with no PCBs being detected in the outfall discharges since 2009.

5. SUMMARY OF SITE CHARACTERISTICS

5.1 Overview

As a result of the deepening of the lower Grasse River in the early 1900's by the Aluminum Company of America, the physical and ecological characteristics of the lower Grasse River were altered. The lower 7.2 miles of the Grasse River comprise approximately 2.3 million cy of sediment over 400 acres, of which, 1.7 million cy of sediment is estimated to be contaminated with PCBs over about 325 acres. The Site has relatively steep side slopes and minimal floodplains. The river is wide (400 to 600 feet) and deep (15 to 25 feet at mid-channel). The majority of the vegetation in the river occurs in the near shore zones (refer to Figure 3 Conceptual Site Model and Section 7 for rationale on which the risk exposure assessment and response are based).

The river within the study area acts as a backwater of the St. Lawrence River due to the early dredging of the lower Grasse River and construction of the FDR Project in the 1950's. The velocity of the lower Grasse River is generally low. Average velocities are estimated to be about 0.1 to 0.2 feet per second and approximately a factor of 10 higher during high-flow events.

These low velocities are a consequence of the large cross-sectional area in comparison to the river flow (average flow is about 1,100 cubic feet per second). When flows are low, especially in the late spring and summer, the lower Grasse River has periods of stratification with cooler (more dense) St. Lawrence River water moving upstream, beneath the warmer (less dense) Grasse River water. In addition, the water surface elevations fluctuate (approximately 1 foot) as a result of water releases within the St. Lawrence Seaway. Outfalls and tributaries within the study area add an incremental flow to the river of less than one percent.

For purposes of the investigation, the Site was divided by transects (T) where each transect represented one-tenth of a mile. In most of the Site reports the river is divided into 72 transects (T1 through T72). In addition, the AofA report separately considered the near shore and main channel areas of the Grasse River in order to evaluate remedial alternatives. "Near shore" is defined for purposes of the Site as the submerged area between the upland and the location where the gentle bathymetric slope along the shoreline meets the steep slope of the main channel side walls. In general, the near shore areas have water depths of five feet or less during normal summer flow and extend approximately 25 feet from shore.

5.2 Chemicals of Concern

PCBs are the primary chemicals of concern addressed in this decision document.

Due to their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were widely used in many industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; and in pigments, dyes, and carbonless copy paper. The Alcoa West Facility started using PCBs in hydraulic oils for their fire retardant properties in the 1950s after a fatal fire accident at another Alcoa plant.

PCBs are a group of chemicals consisting of 209 individual compounds, known as congeners. PCBs were sold in mixtures containing dozens of congeners. These commercial mixtures were known in the U.S. as Aroclors.

Although manufacturing of PCBs was banned in 1979, they can still be released into the environment from poorly maintained hazardous waste sites that contain PCBs; leaks or releases from electrical transformers containing PCBs; and disposal of PCB-containing consumer products into landfills not designed to handle hazardous waste. PCBs may also be released into the environment by the burning of some wastes in municipal and industrial incinerators. At the Site, contaminated sediments are an ongoing source of PCBs to the river.

PCBs are classified by EPA as probable human carcinogens, known carcinogens in animals, and are linked to other adverse health effects such as developmental effects, reduced birth weights and reduced ability to fight infection.

5.3 Summary of Sampling Results and Other Investigations

For the investigation of the Site, Alcoa has conducted numerous studies, summarized in the *CCLGR* Report of April 2001 and *Addendum to the CCLGR* of April 2009 (collectively referred

to as the “Final CCLGR Report”). The investigations included sediment sampling, river flow and water quality studies, fish and biota sampling, a habitat survey, sediment erosion studies, laboratory PCB studies, source investigations, and studies regarding ice jam and scour. Data were obtained from the following major study programs: (1) an initial *River and Sediment Investigation* (1991–1994); (2) the *NTCRA* in 1995 as mentioned above; (3) a *Supplemental Remedial Studies* program (1995–present); (4) Sediment Probing Programs in 1992, 1998, and 2001; (5) Supplemental Sediment Sampling (2000–2001 and 2006–2007); (6) the CPS (2001) as mentioned above; (7) the River Ice Evaluation (2003–2004); (8) Bathymetric Surveys (2003 to 2005); (9) the ROPS (2005) as mentioned above; (10) River Ice Monitoring (2004 to present); (11) the *Ice Control Structures Evaluation* (2005–2009); (12) the *Activated Carbon Pilot Study* (2006); (13) the *Ice Breaking Demonstration Project* (2007); and (14) the *Near Shore Sampling Program* (2010). Additional investigations and modeling were conducted to study the fate and transport of the PCBs at the Site. As a result of these investigations, pilots, and demonstration projects, approximately 15 acres of river sediment have been capped and 29,000 cy of PCB-contaminated sediment containing 15,200 pounds of PCB mass have been removed from the river. Based on the results of the studies listed above, the 7.2 miles of the lower Grasse River have been determined to be the area of primary concern. Summaries of some of the major findings of these studies are presented below. More detail can be found in the Final CCLGR Report, the AofA Report and other documents in the administrative record file.

5.3.1 Sediment

Over 5,000 sediment samples have been collected at the Site to determine the nature and extent of PCB-contaminated sediment.

Deposits of sediment exist on most of the bottom of the lower Grasse River. In most areas of the Site, soft sediment deposits are underlain by bedrock or glacial till. These sediment deposits typically range from 0 to 5 feet in depth, with isolated pockets up to 10 feet deep. The upstream half mile of the 7.2 mile Site (in T1-T5) has a thin veneer of sand and gravel over bedrock. PCB concentrations in the sediment core data collected from the main channel of the river from 1991 through 2007 indicate that the maximum PCB concentrations tend to be at depth. The sediment data collected from the near shore (2010) indicated that the peak sediment PCB concentrations above 1 mg/kg generally occur within the top 1 to 1.5 feet of sediment. Based on the investigations, it is estimated that approximately 1.7 million cy of sediment are contaminated with measurable PCBs over a 325 acre area.

The main channel in the T1 to T21 transects of the river are prone to potential scouring of sediment from severe ice jam events, which can mobilize PCBs.⁷ The estimated volume of contaminated sediment in the main channel is approximately 330,000 cy over a 59-acre area,

⁷ Ice jam-related scour is primarily of concern from T1 to T19. For purposes of developing remedial alternatives, however, T21 was used to define the downstream extent of the Grasse River that is potentially subject to ice jam-related scour because a contiguous sediment deposit runs from T19 to T21, and any remedy would be expected to address the contiguous deposit as a whole. T21 is included in both the upstream (T1-T21) and downstream (T21-T72) reaches because the contiguous sediment deposit does not cover all of T21, and it therefore may be necessary to apply the upstream and downstream cleanup criteria to separate areas within T21, depending on the specific sediment characteristics in a particular location. Application of the cleanup criteria in T21 will be determined during remedial design.

with PCB concentrations ranging from non-detect (ND) to 3,106 mg/kg, with an average concentration of 82 mg/kg. Sampling data to date have been inconclusive in demonstrating a lack of scouring in the near shore zone, and scouring in the upper two miles of the near shore is possible in the future. The near shore from T1 to T21 contains approximately 25,900 cy of contaminated sediment over a 10-acre area with PCB concentrations ranging from ND to 3,070 mg/kg and an average concentration of 68 mg/kg.

For the remainder of the Site (T21 to T72), the investigations concluded that the contaminated sediment in the main channel and near shore is stable even under extreme flow conditions. Mathematical modeling assuming maximum erosion indicated that a 100-year flood event would result in about 0.9 cm (0.35 inch) net erosion, and a 500-year flood event would result in between 1 and 1.5 cm (0.39 to 0.59 inches) of net erosion. It is primarily the surface sediment in this region that has the greatest potential impact on the biota. The surface sediment was defined for the purposes of the AofA Report as the top 6 inches in the main channel and the top 12 inches in the near shore sediment. The estimated contaminated sediment in the main channel from T21 to T72 is approximately 1.2 million cy over a 225-acre (approximate) area with PCB concentrations ranging from ND to 1,063 mg/kg and an average concentration of 57 mg/kg. The PCB concentration in the top 6 inches of sediment ranges from ND to 558 mg/kg, with an average concentration of 22 mg/kg. The contaminated sediment in the near shore from T21 to T72 is approximately 82,800 cy over a 31-acre area with PCB concentrations ranging from ND to 313 mg/kg and an average of 14 mg/kg. The sediment concentrations in the top 12 inches range from ND to 167 mg/kg with an average concentration of 8 mg/kg.

5.3.2 Water Column

The water column has been monitored for PCBs at several transects (see Figure 4 Water Column Monitoring Locations). Since the mid-1990s, over 2,000 water column samples have been collected. PCB concentrations in the water column exhibit distinct seasonal patterns, with concentrations typically being highest in the summer and lowest in the late fall (water column data are not collected in the winter months when the river is covered with ice).

Of the 79 surface water samples collected upstream of the Site at the Main Street Bridge (WC-MSB) between 2006 and 2011, six samples had concentrations above the detection limit. The detected concentrations ranged up to 3 nanograms per liter (ng/L). The average PCB concentrations of the samples collected at WC-MSB between 2006 and 2011 was about 0.2 ng/L. The Power Canal also releases a small flow of water to the lower Grasse River upstream of the Alcoa West Facility. The water column PCB concentrations in the Power Canal averaged 7.9 ng/L in 1998 and 1.9 ng/L in 2002.

Within the Site, at water column monitoring station WC007 near T16, the average summertime PCB concentrations have declined from approximately 115 ng/L in 1996 to about 20 ng/L in 2007. At water column monitoring station WC131/WC007A between T22 and T23, PCB concentrations have declined from approximately 200 ng/L in 1996 to about 8 ng/L in 2011. At WC011 near T38, PCB concentrations have declined from 130 ng/L in 1997 to approximately 12 ng/L in 2011.

Though the PCB concentrations in the water column have dramatically decreased over the years

due mostly to upland source controls, outfall and tributary remediation, and partially due to natural sedimentation and in-river pilot work and demonstrations, the data also indicate that PCBs in sediment pore water⁸ at the Site are a persistent, widespread, and diffuse source of PCBs to the water column.

5.3.3 Fish

PCB concentrations observed in fish are a result of exposure to PCBs in water and surface sediment, through an aquatic food chain or a benthic food chain, respectively.

Alcoa has collected more than 3,000 fish samples consisting of three species (smallmouth bass, brown bullhead, and spottail shiner) over a period of 17 years. The fish are collected in the fall of each year in three different stretches (Upper, Middle and Lower) of the Site and in the background stretch of the Grasse River. PCBs have rarely been detected in any of the three fish species collected from the background stretch. Within the Site, PCBs are consistently found in fish tissue. The concentrations of PCBs in fish tissue have decreased since the early 1990s mostly due to various remedial actions that have occurred since that time; however, the rate of this decline has decreased since 2001. The average concentration of PCB concentrations in smallmouth bass filets have decreased from 17 mg/kg (ranging from 1.4 to 67 mg/kg) in 1993 to about 0.7 mg/kg (ranging from non-detect to 2 mg/kg) in 2011. Average PCB concentrations in brown bullhead filets have also decreased from 8.1 mg/kg (with a range of 0.9 to 35 mg/kg) in 1993 to 0.8 mg/kg (ranging from ND to 2 mg/kg) in 2011. PCB levels in whole-body spottail shiner collected from areas that have undergone the most substantial remediation including from near Outfall 001 and near the Unnamed Tributary decreased from an average of 5.1 mg/kg (with a range of 3 to 5.7 mg/kg) in 1998/1999 to about an average of 1.9 mg/kg (with a range of 1.1 to 3 mg/kg) in 2011. All fish tissue data provided above are on a wet weight basis. In more recent years the amount of lipids detected in fish tissue samples has decreased, potentially due to analytical changes, providing some uncertainty to the PCB tissue concentrations.

Because PCBs tend to accumulate in fatty tissues, it is also important to examine PCB concentrations in fish on a lipid (fat) basis for trend analysis. Similar decreases to the wet weight fish tissue concentrations discussed above have also been observed in the lipid basis data. Overall, lipid-normalized PCB concentrations in both smallmouth bass and brown bullhead have decreased by more than 90 percent since the mid-1990s. By comparison, lipid-normalized PCB concentrations in young-of-year spottail shiner have decreased by 55 to 60 percent since the mid-1990s. Lipid-based concentrations would also be affected by the analytical uncertainties described above. The remediation of the Alcoa West Plant through the NYSDEC Order for land-based cleanup and the reduction of PCBs in the outfall discharges have provided the greatest contribution towards the decrease of PCB concentrations in fish. However, a fish consumption advisory issued by the NYSDOH currently indicates that no species of fish from the lower Grasse River should be eaten.

⁸ Pore water is the subsurface water in the sediment interstices, or in between the sediment grains.

6. CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

The Grasse River is a New York State Class B fresh surface water body, which means the best usages for the river are “primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival” (6 NYCRR § 701.7). The lower Grasse River is used for various recreational activities such as fishing, boating, and water sports. However, a fish consumption advisory issued initially in 1990 and updated annually by NYSDOH currently indicates that no species of fish from the lower Grasse River (i.e., mouth of Grasse River to the Power Canal) should be eaten because of PCBs in the fish. In the Massena Power Canal, the recommendation is to eat no more than one meal per month of smallmouth bass for men over 15 years and women over 50 years, but for children under the age of 15 years and women up to age 50 years, the advice is eat none. Grasse River water is also used for domestic purposes (watering lawns and gardens) and agriculture (irrigating crops). The Grasse River is not currently used as a public water supply. There is no commercial transportation use of the river.

The Grasse River contains a diversity of habitats that supports a variety of species and is a corridor for species to travel between the “upper” river (upstream of Massena) and the St. Lawrence River. The State of New York has designated the Grasse River as a Significant Coastal Fish and Wildlife Habitat based on the significance of the habitats in the river in supporting cool and warm water fish populations including muskellunge, smallmouth bass, northern pike, walleye, bullhead, yellow perch, and lake sturgeon. Observations of both adult and juvenile muskellunge indicate that the Grasse River likely supports a spawning population of resident muskellunge and may serve as a spawning ground for fish residing in the St. Lawrence River. Multiple studies conducted by academic researchers have demonstrated the successful spawning, juvenile rearing, and adult population of lake sturgeon, a New York State (NYS)-listed threatened species, in the Grasse River. Additional state- and federally-listed species have been documented in or around the Grasse River. Documented species include the NYS-listed endangered black tern; NYS-listed threatened bald eagle, Blanding’s turtle, common tern, eastern sand darter, mooneye, and upland sandpiper; and, NYS-listed species of special concern osprey and wood turtle. Indiana bats are both federally- and NYS-listed endangered species known to exist in St. Lawrence County. Many regulated species (such as sport fish, waterfowl, mink, turtle, and birds) are known to frequent the impacted areas. The ecological risk assessment (discussed below) has shown that PCB contamination poses a risk to the species at the Site, and that remediation is expected to reduce or eliminate those risks.

The Mohawk name associated with the Grasse River is *Nikentsiake*, meaning “full of large fishes” or “where the fish live.” Tribal members had fished and hunted the lower Grasse River prior to the issuance of fish consumption advisories (eat none) and harvested sweet grass and other medicinal plants for traditional practices from the Indian Meadows. The SRMT intends to use the cultural resources in the future and consume fish once advisable.

The United States maintains that land reserved to the SRMT by the 1796 Treaty includes the Indian Meadows described in Part 2, Section 1 (Site Name, Location, and Description), above. EPA notes, however, that the lands reserved by the 1796 Treaty are currently in dispute. *See Canadian St. Regis Band of Mohawk Indians v. State of New York, et al.*, 5:82-cv-783 (N.D.N.Y.). Fishing, hunting, harvesting and spiritual ceremonies are among the activities that

have been historically and are now conducted by the SRMT in the lower Grasse River and the Indian Meadows. The lower Grasse River and the Indian Meadows are of significant cultural significance to the SRMT.

Primary land uses in the vicinity of the lower Grasse River, including the Indian Meadows and the Town of Massena, include residential, agricultural, industrial, recreational and tribal activities. It is expected that future uses of these areas will be similar to the current uses.

7. SUMMARY OF SITE RISKS

Based upon the results of the Final CCLGR, a baseline risk assessment was conducted for the Site to estimate the risks associated with current and future site conditions. A baseline risk assessment is an analysis of the potential adverse human health and ecological effects caused by hazardous substance releases from a site assuming no further actions are taken to control or mitigate exposure to these hazardous substances.

7.1 Human Health Risk Assessment

The site-specific baseline Human Health Risk Assessment (BHHRA) was conducted to estimate the cancer risks and non-cancer health hazards to human health associated with the current and future exposures to chemicals in the Grasse River (i.e., sediment, surface water and fish). The BHHRA analyses for the Site are identified in the 1993 *Revised Risk Assessment ALCOA Study Area*; the 2002 Update to the 1993 Revised Risk Assessment which includes data on fish tissue collected from 1997 to 2000 and updates to the exposure and toxicity information in the 1993 Revised Risk Assessment; and the 2010 Addendum⁹ to assess non-PCB chemical contaminants evaluated in the 1993 Revised Risk Assessment to determine if changes in toxicity values and exposure assumptions after 1993 affect the conclusions from the 1993 Revised Risk Assessment. These documents are available in the Administrative Record.

The BHHRA evaluated exposure to sediment, surface water and fish at the Site. The reaches that represent background conditions (i.e. Reaches 1 and 2) located upstream of the Alcoa West Facility were also evaluated. The chemicals of concern (COCs) for the Site are PCBs, with exposure to PCBs via consumption of fish from the lower Grasse River posing the greatest risk.

This discussion emphasizes cancer risks and non-cancer health hazards due to PCBs and other chemicals in the Grasse River that exceed EPA's goal of protection, which is an excess cancer risk of one in one million and a non-cancer hazard index (HI) of 1. The cancer risk and non-cancer HI in the Grasse River are above EPA's levels of concern for fish consumption.

Consistent with Superfund policy and guidance, the BHHRA is a baseline risk assessment and therefore assumes no actions (remediation) to control or mitigate hazardous substance releases and no institutional controls, such as the NYSDOH fish consumption advisories. Cancer risks

⁹ The Addendum was conducted to take into consideration changes in toxicity factors (reference doses and cancer slope factors) that were identified by USEPA in 2009 and additional updates in 2010. The Addendum can be found in Appendix G of the 2012 Analysis of Alternatives Report.

and the non-cancer HI were calculated based on an estimate of the reasonable maximum exposure (RME) expected to occur under current and future conditions at the Site. The RME is defined as the highest exposure that is reasonably expected to occur at a site. EPA also estimates cancer risks and the non-cancer HI based on Central Tendency Exposure (CTE), or average, exposures at the Site. Remedial decisions under the Superfund program are based on the RME individual. The following sections summarize the components of the BHHRA with respect to the basic steps in the Superfund Risk Assessment process: 1) Data Collection and Analysis (Hazard Identification); 2) Exposure Assessment; 3) Toxicity Assessment; and 4) Risk Characterization.

7.1.1 Data Collection and Analysis

The BHHRA evaluated a range of chemicals including volatiles, base neutral contaminants (semi-volatiles), dioxins/furans, PCBs, and inorganics in sediment, surface water, and fish in Reaches 1 and 2, Reaches 4 through 8, and Reaches 7 and 8 of the Grasse River. Chemicals of Concern (COC) at the Site were identified based on factors such as toxicity, frequency of occurrence, and concentration in surface water, sediment and fish. The BHHRA identified PCBs as the COC in fish in Reaches 1 and 2, Reaches 4 through 8, and Reaches 7 and 8. Dioxin Toxicity Equivalence Factors (TEFs) established by the World Health Organization (Van den Berg et al., 2006, and USEPA, 2010) were used to convert polychlorinated dibenzodioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) congeners to Dioxin Toxicity Equivalency (TEQ) and dioxin TEQ was identified as a COC in fish and sediment in Reaches 4 through 8. Reach 3, located in the Power Canal, was analyzed in the 1993 *Revised Risk Assessment ALCOA Study Area*.

Calculated cancer risks and non-cancer HI to local anglers from exposure to dioxin TEQ resulted in none of the cancer risks exceeding the upper end of EPA's risk range of one in 10,000 (1×10^{-4}) or an HI of 1 established under the NCP. One exception was the non-cancer HI of 3 for dioxin TEQ based on consumption of fish within Reaches 4 through 8. Cancer risks and non-cancer HI to local anglers in Reaches 4 through 8 were calculated using fish congener data contained in both the Phase I Grasse River and Sediment Investigation (Ecology and Environment, Inc., 1992) and River and Sediment Investigation (RSI) Phase II Report (BBL, 1994). Congener data from the 14 sampled fish were converted to dioxin equivalent concentrations using the 2005 World Health Organization's TEFs. The resulting calculations found that the cancer risks were 1×10^{-4} which is within the risk range established under the NCP, and that the non-cancer HI was 3, which is above the goal of protection. The calculated non-cancer HI was significantly lower than the HI of 160 calculated for PCBs for the local angler. The uncertainty discussion below in Section 7.1.4. (Risk Characterization) discusses the frequency of detection of the various congeners and supports the selection of PCBs as the COC for the Site. Information regarding the analysis for dioxin TEQ is available in the Addendum – Appendix G of the 2012 AofA Report.

The exposure point concentration (EPC) is the concentration of PCBs in a given environmental medium at the point of human contact. Estimates of the EPC represent the concentration term used in the exposure assessment component of the quantitative risk evaluation. EPCs for PCBs and TEFs are provided for fish in Table 7-1 for Reaches 1 and 2, Reaches 4 through 8 and Reaches 7 and 8. In addition, Table 7-2 provides sediment data for Reaches 4 through 8 and

Reaches 7 and 8. The tables include a summary of the COCs minimum and maximum concentrations and EPCs developed using ProUCL, a statistical tool used by EPA to calculate EPCs and EPA's Supplemental Guidance to the Risk Assessment Guidance: Calculating the Concentration Term.

7.1.2 Exposure Assessment

This step in the risk assessment estimates the magnitude of actual and/or potential human exposures, the frequency and duration of these exposures, and the pathways by which humans are potentially exposed (i.e., ingestion of contaminated fish).

Conceptual Site Model. Table 7-4 provides the rationale for inclusion or exclusion of exposure pathways (also refer to Figure 3 for Conceptual Site Model). Fish ingestion by anglers in Reaches 1 and 2, Reaches 4 through 8 and Reaches 7 and 8 posed the greatest cancer risks and non-cancer HI. Recreational exposure through dermal contact and ingestion of sediments and surface water were also evaluated but were determined to be within the acceptable risk range.

Exposed Individuals. Potential current and future receptors that may be exposed to hazardous substances in the Grasse River include: local adult anglers who consume fish from Reaches 1 and 2 and Reaches 4 through 8, and SRMT anglers who consume fish and contact sediments while pulling gillnets from the water in Reaches 7 and 8.

The BHHRA evaluated the following specific reaches of the River (see Figure 5):

- Reaches 1 and 2, located upstream of the Alcoa West Facility, for exposures to sediment and surface water by swimmers and consumption of fish by local anglers;
- Reaches 4 through 8, located adjacent to and/or downstream of the Alcoa West Facility, for exposures to sediment and surface water by swimmers and consumption of fish by local anglers; and,
- Reaches 7 and 8, located further downstream, for consumption of fish by Mohawk anglers.

Reach 3 is the Power Canal and was analyzed in the 1993 *Revised Risk Assessment ALCOA Study Area*.

Recreational users of the Site include adults (18 years and older), adolescents (ages 7 to 18 years) and young children (1 to 6 years) who may camp near or swim in the Grasse River. The cancer risks to these receptors from direct contact with PCBs were determined to be within the risk range. The non-cancer HI from exposure to sediments in Reaches 4 through 8 were found to be slightly above the goal of protection, the HI for the young child was 1.3 and for adolescent, 1.5.

Exposure Point Concentrations. Exposure point concentrations in fish, sediment and surface water were estimated using either the maximum detected concentration of a contaminant or the 95%, 97.5% or 99% upper-confidence limit (UCL) of the average concentration. Chronic daily

intakes were calculated based on exposures to the RME individual. The RME is intended to represent a conservative exposure scenario that is still within the range of possible exposures. A CTE or average exposure also is provided. A complete evaluation of all exposure scenarios can be found in the BHHRA.

Fish Ingestion Rate. Based on the 1991 New York State Angler survey of fish consumption by licensed anglers, the RME fish ingestion rate for adults was determined to be 31.9 grams/day, or about 51 half pound meals per year, and the CT (average) fish ingestion rate was determined to be 4.0 grams/day, or about six half pound meals/year (Connelly et al., 1992).

The fish ingestion rate for the SRMT members used in the assessment was 142 grams/day and represents the 95th percentile for SRMT fish consumers. The ingestion rate is based on an analysis of data collected from SRMT members in 1980 and summarized in the 1995 NYSDOH study (Forti et al., 1995). The ingestion rate is equivalent to approximately 228 half pound meals per year or 4 half pound meals per week. The CT SRMT average fish ingestion rate, based on the same study, is 31 grams/day and is equivalent to approximately 50 half pound meals per year.

Information on the fish ingestion rates for young children and adolescents were provided in the Proposed Plan. For the young child fish ingestion rates would be approximately 1/3 of an adult and for an adolescent would be approximately 2/3 of an adult. For the local angler this equates to 10.6 grams/day for children ages 1 to 6 years and 26.8 grams/day for adolescents. For the SRMT, the ingestion rates would be 47.3 grams/day for the young child and 95.1 grams/day for the adolescent.

Exposure Duration. The exposure duration for local anglers is assumed to be 30 years for the RME scenario. For the SRMT anglers, harvest and fish consumption from Reaches 7 and 8 was assumed to be a period of 70 years. The 70 year exposure duration for SRMT anglers was based on discussions with SRMT who indicated Mohawk residents spend their entire life at Akwesasne (Jock, 1991). Under the CT exposure scenario, the exposure duration of local and SRMT anglers was assumed to be 9 years (50th percentile for time spent at a single residence, USEPA, 1989a) and 35 years (50% of the RME exposure duration), respectively.

Other Exposure Assumptions. Exposures assumptions for body weight, skin surface area, sediment ingestion rates, and time spent swimming were primarily obtained from EPA's *Standard Default Exposure Assumptions, Risk Assessment Guidance for Superfund, Dermal Exposure Assessment Guidance, and Exposure Factors Handbook*.

Environmental Justice. In furtherance of EPA's Environmental Justice policy, known as Plan EJ 2014, Region 2 has identified Akwesasne, the territory of the SRMT, as a community with environmental justice concerns. Members of the SRMT, which is a low-income minority community, have been burdened by the environmental and health impacts of pollution in the local river systems, including the Grasse River, due primarily to the consumption of local fish contaminated with PCBs. EPA investigations revealed that culturally the Akwesasne is a subsistence fishing/high fish consumption community. The potential for adverse health impacts from consumption of fish contaminated with PCBs is well documented.

7.1.3 Toxicity Assessment

The toxicity assessment determines the types of adverse health effects associated with exposure to COCs and the relationship between the magnitude of exposure (dose) and severity of adverse effect (response).

Sources of Toxicity Information. The BHHRA used the current consensus toxicity values for PCBs from EPA's Integrated Risk Information System (IRIS) in evaluating the cancer risk and non-cancer health effects of PCBs and the TEFs. IRIS provides the primary database of chemical-specific toxicity information used in Superfund risk assessments. For the dioxin TEFs discussed above, the HHRA used toxicity information for dioxin (2,3,7,8-TCDD) provided in EPA's 1997 Health Effects Assessment Summary Tables and the EPA's 2010 Dioxin TEF document.

Cancer. The primary COC for the Site is PCBs. EPA has determined that PCBs cause cancer in animals and probably cause cancer in humans. EPA's classification for PCBs is B2 indicating the chemical is a probable human carcinogen. EPA's cancer slope factors (CSFs) for PCBs represent plausible upper bound estimates, which means that EPA is reasonably confident that the actual cancer risks will not exceed the estimated risks calculated using the CSFs.

Table 7-6 provides a summary of the cancer toxicity data.

Non-Cancer Health Effects. Non-cancer health effects have been observed in animals exposed to PCBs. Studies of Rhesus monkeys exposed through ingestion of PCBs (*i.e.*, Aroclors 1016 and 1254) indicate a reduced birth weight in offspring exposed *in utero* and reduced ability to fight infection, respectively. The toxicity assessment is an evaluation of the chronic (7 years or more) adverse health effects from exposure to PCBs. The chronic Reference Dose (RfD) represents an estimate (with uncertainty spanning perhaps an order of magnitude or greater) of a daily exposure level for the human population, including sensitive populations (*e.g.*, children), that is likely to be without an appreciable risk of deleterious effects during a lifetime. At the current time, EPA is conducting an update of the toxicity value for PCBs through the IRIS process.

Table 7-5 provides a summary of the non-cancer toxicity data.

7.1.4 Risk Characterization

This final step in the HHRA combines the exposure and toxicity information to provide a quantitative assessment of site risks. Exposures are evaluated based on the potential risk for developing cancer and the potential for non-cancer health hazards.

Cancer Risks

Cancer risk is expressed as a probability. For example, a 10^{-4} cancer risk means a "one in 10,000 excess cancer risk," or an increased risk of an individual developing cancer of one in 10,000 as a result of exposure to site contaminants under the conditions used in the Exposure Assessment. Under the federal Superfund program, EPA's goal of protection is an excess cancer risk of 10^{-6} (one in 1,000,000) or less for the RME individual. Acceptable cancer risks, established under the

National Contingency Plan, are an individual lifetime excess cancer risk at or below the range of 10^{-4} to 10^{-6} .

Excess lifetime cancer risk is calculated from the following equation:

$$\text{Risk} = \text{CDI} \times \text{CSF}$$

where:

Risk	=	a unitless probability (e.g., 1×10^{-6} of an individual developing cancer)
CDI	=	Chronic Daily Intake averaged over 70 years (mg/kg-day)
CSF	=	Cancer Slope Factor, expressed as (mg/kg-day) ⁻¹

At this Site, cancer risks to the RME individual associated with ingestion of fish are above EPA's generally acceptable levels, as shown below. In addition, cancer risks to the average (CT) individual associated with ingestion of fish are above EPA's goal for protection of 1×10^{-6} .

The PCB cancer risks to anglers consuming fish, organized by reach, are as follows:

- Reaches 1 and 2. The risks for the RME individual were 3×10^{-5} (3 in 100,000) and are within the acceptable risk range. The risks to the local adult angler in Reaches 1 and 2 were 3×10^{-7} (3 in 10,000,000) for the CTE individual, which is less than the risk range.
- Reaches 4 through 8. The risks to the local adult angler fishing in Reaches 4 through 8 were 3×10^{-3} (3 in 1,000) for the RME adult individual and 3×10^{-5} (3 in 100,000) for the CTE individual. The risks to the RME individual exceeded the risk range and for the CTE individual were within the acceptable risk range.
- Reaches 7 and 8. The risks to the local adult SRMT angler fishing in Reaches 7 and 8 were 2×10^{-2} (2 in 100) for the RME adult individual and 7×10^{-4} (7 in 10,000) for the CTE individual. The risks to the RME and CTE individual are above the acceptable risk range.

The cancer risks to the young child and adolescent consuming fish are lower than those of the adult based on differences in ingestion rate, body weight, and exposure duration. The calculated risks for the young child and adolescent in Reaches 4 through 8, including a separate analysis for Reaches 7 and 8, remain above the acceptable risk range of 10^{-4} to 10^{-6} .

The re-evaluation of the cancer risks associated with other contaminants in fish, sediments, and surface water is provided in the 2010 Addendum to the HHRA. This Addendum provides updated calculations of cancer risks for dioxin TEQ at the Site that were identified in the 1993 Risk Assessment. The revised estimates are based on changes in the toxicity factors since the original risk assessment of 1993. The cancer risks associated with PCDD and PCDF congeners from ingestion of fish within Reaches 4 through 8 were 1×10^{-4} and are within the upper bounds of the risk range. (See Tables 7-7 and 7-8).

Non-Cancer Health Hazards

The potential for non-cancer health effects is evaluated by comparing an exposure level over a specified time period (*e.g.*, 7 years) with an oral Reference Dose (RfD) derived for a similar exposure period. An RfD represents a level that an individual may be exposed to that is not expected to cause any deleterious effect. The ratio of exposure to toxicity is called a Hazard Quotient (HQ). An HQ less than 1 indicates that a receptor's dose of a single contaminant is less than the RfD, and that toxic non-carcinogenic effects from exposure to that chemical are unlikely. An HI represents the sum of the individual exposure levels for different chemicals and different media (*e.g.*, fish and sediment).

The PCB non-cancer hazards to anglers consuming fish, organized by reach is as follows:

- Reaches 1 and 2. The non-cancer HI for the RME individual is 1.6 and exceeds the goal of protection of 1. The non-cancer HI for the CTE individual is 0.1 and is within the goal of protection.
- Reaches 4 through 8. The non-cancer HI for the RME individual is 160 and for the CTE individual is 9.9. The non-cancer HI for the RME and CTE individual are above the goal of protection.
- Reaches 7 and 8. The non-cancer HI for the RME individual is 615 and for the CTE individual is 67. The non-cancer HI for the RME and CTE individual are above the goal of protection.

The non-cancer health hazards for a young child (1 to 6 years of age) consuming fish would be approximately 1.6 times higher than that of an adult assuming an ingestion rate of 1/3 of that of the adults for all stretches of the River. The non-cancer hazards for the adolescent consuming fish (7 to 18 years) would be approximately 1.1 to 1.2 times higher than the adult HI assuming an ingestion rate of 2/3 that of the adult for all reaches of the River. The non-cancer hazards in all reaches for the adolescent and young child are above the goal of protection.

The re-evaluation of the non-cancer HI associated with other contaminants in fish, sediments, and surface water is provided in the 2010 Addendum to the HHRA. This Addendum provides updated calculations of risks and hazards from dioxin TEQ at the Site that were identified in the 1993 Risk Assessment. The revised estimates are based on changes in the toxicity factors since the original risk assessment of 1993. The non-cancer HI for the adult angler within Reach 4 to 8 was an HI of 3, which exceeds the goal of protection. The non-cancer HI related to dioxin TEQ are significantly less than those posed by PCBs. (See Tables 7-8 and 7-9).

Uncertainties

The procedures and inputs used to assess risks in this evaluation are subject to a variety of uncertainties. The main sources of uncertainty in the BHHRA are described below.

Uncertainty associated with the analytical methods and instruments used in the analysis of the samples may result from changes in analytical methods since the original risk assessment was developed in 1993. The samples used in the BHHRA were subjected to quality assurance and quality control review and determined to be appropriate for use in the risk assessment. These

uncertainties are generally likely to have a low impact on the assessment.

The selection of COCs can also lend uncertainty to the risk assessment, but the selection process is generally conservative, so it is unlikely that chemicals that should be COCs are overlooked. Several chemicals evaluated were not quantitatively evaluated in the assessment based on a lack of toxicity values. The lack of toxicity values may result in a potential underestimate of cancer risks and non-cancer health hazards but based on the COCs identified the impact is expected to be small.

Uncertainties can also be associated with the selection of exposure points and pathways and the estimation of EPCs. At this site, the calculation of EPCs is based on the calculation of UCLs. The RME exposure assumptions incorporated in the BHHRA are intended to be conservative and may overestimate the risk.

Uncertainties are also associated with the toxicity information used to conduct the risk assessment. The IRIS program conducts re-evaluations of a range of chemicals including the non-cancer toxicity of PCBs. The impacts of these updates to toxicity values will not be known until the reassessments are completed.

As discussed in Section 7.1.1. (Data Collection and Analysis), the non-cancer HI was 3 for dioxin TEFs in fish within Reaches 4 to 8 consumed by the local anglers. This HI is significantly lower than the HI associated with PCBs (HI = 160) for these same reaches of the river. The TEFs in fish from Reaches 4 to 8 showed variability. No congeners were detected in four of the 14 fish. Six of the 17 PCDD and PCDF congeners were not detected in any fish. The most commonly detected congeners were 2,3,7,8-tetrachlorodibenzofuran and octachlorodibenzofuran, and both were detected in only six of the 14 fish. The total dioxin TEQ including 2,3,7,8-TCDD resulted in an HI of 3 but without this specific congener 2,3,7,8-TCDD, the HI would be 2. 2,3,7,8-TCDD was not detected in water or sediment near or downstream of the facility and this congener was detected in only one of the 14 fish samples used in the calculation of the HI. These uncertainties support the conclusion from the original 1993 Risk Assessment that PCBs are the primary driver of the non-cancer HI for the Grasse River.

7.2 Ecological Risk Assessment

This section summarizes the results of the Ecological Risk Assessment (ERA) process and is based on the July 2010 Ecological Risk Analysis Update (ERAU) report (SRC/SERAS 2010). The July 2010 ERAU report combines into a single report the ERA that was included in the 1993 *Revised Risk Assessment ALCOA Study Area* and the additional ecological risk analysis incorporating data for sediment, surface water, river bank sediment, whole body fish tissue, and invertebrate tissue data collected through 2008, immediately prior to the commencement of the ERA in 2009.

The lower Grasse River is home to a wide variety of aquatic and riparian habitats and is located within the St. Lawrence Plain ecological zone of New York State. This zone can be characterized as a gently rolling agricultural landscape interspersed with small woodland areas. A habitat assessment to determine the site-specific habitats and species that may be affected by

the alternatives have not yet been completed, however will be performed during the design. The Grasse River lies within the Upper Saint Lawrence River watershed. It is a large, medium-gradient river characterized by riffles and pools flowing over bedrock, cobble, and gravel substrate. In 1994, the New York Department of State's Division of Coastal Resources designated the Grasse River from its confluence with the St. Lawrence River to the Madrid Dam a significant coastal fish and wildlife habitat.

Consistent with Superfund policy and *Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments*, the ERA is a baseline risk assessment of the current and potential threats to the environment from hazardous substance releases, and therefore assumes no actions (remediation) to control or mitigate such releases. The following discussion summarizes the ERA with respect to the four basic steps of the Superfund ERA process: 1) Problem Formulation; 2) Exposure Assessment; 3) Effects Assessment; and 4) Risk Characterization.

7.2.1 Problem Formulation

Problem formulation is a qualitative evaluation of contaminant release, migration, and fate; identification of COCs, receptors, exposure pathways, and known ecological effects of the contaminants; and selection of endpoints for further study.

PCBs, including dioxin-like PCBs, are the contaminants of concern at the Site for the ERA based on the results of earlier investigations. Animals and plants living in or near the river, such as invertebrates, fish, amphibians, reptiles, birds, and mammals, are or can be exposed to PCBs directly and/or indirectly through the food chain. Ecological exposure to PCBs is primarily an issue of bioaccumulation through the food chain rather than direct toxicity. As a result, the ERA emphasizes indirect exposure various upper trophic level receptors to address PCB-related risks at higher trophic levels.

Several assessment endpoints were selected for the ERA to provide adequate support to EPA decisions on the ecological basis of action. Because it is not practical or possible to directly evaluate risks to all of the individual components of the Site ecosystem, appropriate selection and definition of assessment endpoints are critical to focus the risk assessment on particular components of the ecosystem that could be adversely affected by the contaminants associated with the Site. The assessment endpoints selected for this Site include the survival, growth, and reproduction of: 1) aquatic organisms (including fish); 2) piscivorous (fish-eating) bird and mammal populations; and, 3) insectivorous (insect-eating) mammal populations. Measurement endpoints were defined for each assessment endpoint and were used to evaluate the exposures to PCBs in sediment, water, tissues, and estimated daily consumption doses relative to toxicity reference values (TRVs; see below).

Receptors were selected to be representative of the various assessment endpoints. Receptors of concern representing aquatic organisms included aquatic plants, benthic macroinvertebrates and fish. The belted kingfisher (*Ceryle alcyon*) and mink (*Mustela vison*) were selected for piscivorous birds and mammals, respectively. The insectivorous mammals were represented by the little brown bat (*Myotis lucifugus*). (Refer to Figure 5-1 a food chain model from 1993 Risk Assessment)

7.2.2 Exposure Assessment

Exposure assessment is a quantitative evaluation of contaminant release, migration, and fate; characterization of exposure pathways and receptors; and measurement or estimation of exposure point concentrations. Exposure concentrations representing current sediment, water, and biota (fish and aquatic macroinvertebrates) concentrations of PCBs were based on data collected from 2003 to 2008 for T1 to T19 and 2000 to 2008 for T20 to T72. In the T1 to T19 transects, data collected prior to the ice jam scour of 2003 were not included in the analysis. The most recent sediment data available were collected in 2007; the most recent water and fish tissue data were collected in 2008. Food chain models were then used to estimate receptor exposures for birds and mammals.

PCBs in Sediment: PCB concentrations in surface sediments were based on numerous core and grab samples taken throughout the study area including the main river channel, near-shore, and river bank habitats. The core samples were collected at sediment depths of 0-3 inches and 3-12 inches to ensure consistency with the depth designated as “surface sediment” in the 1993 ERA (0 to 12 inches). The overall mean total PCB concentrations of the 0-3 inch core samples from T1 to T19 and T20 to T72 were 19.1 and 10.1 mg/kg, respectively; the 0-12 inch core sample means were 22.1 and 14.3 mg/kg, respectively. The grab samples were taken at sediment depths of 0-3 cm from the river and river banks and mean total PCBs for T1 to T19 and T20 to T72, respectively, ranged from 31.3 to 25.7 mg/kg in river sediment, and 0.316 to 1.15 mg/kg in river bank sediment. Total PCB concentrations tended to be higher in sediment samples collected from the main channel. Several dioxin-like PCB congeners (PCB-77, -105, -114, -118, -123, -156, and -167) were detected in sediment collected across the study area. Notably, PCB-126 was not detected; nor were congeners PCB-81, -157, -169, and -189.

PCBs in Surface Water: Surface water samples were collected and analyzed for PCBs before, during, and after the 2001 CPS; before, during and after the 2005 ROPS; and annually from 1998 to 2008 during the Supplemental Remedial Studies program. Sampling related to the CPS indicated that PCBs were rarely detected before the CPS and were not detected following the study; however, during the study, the concentrations of Aroclors 1232, 1242, 1248, 1254, 1260, and total PCBs were detected near the detection limit. During the ROPS, Aroclors and PCBs were detected during, but not before or after the study. The detected concentrations of the Aroclors or total PCBs noted above ranged from 0.025 to 0.48 µg/L. Current conditions are best represented by the Remedial Studies program sampling data and mean concentrations of total PCBs ranged from 0.03 to 0.45 µg/L. The dioxin-like congeners PCB-77, -81, -105, -118, and -156 were detected. PCB-126 as well as other dioxin-like congeners was not detected.

PCBs in Biota: Fish were monitored annually during the current period. Young-of-the-year spottail shiners (< 6.5 cm) were collected annually and analyzed for whole body PCBs. Adult smallmouth bass (> 25 cm) and brown bullhead (> 25 cm) were also collected annually for analysis of PCBs in fillet. The mean concentrations of total PCBs in spottail shiner were viewed three ways: 1) as the entire current period (*i.e.*, 2003-2008 for T1 to T19; 2000-2008 for T20 to T72); 2) as the current period excluding the ROPS (2005) sampling year; and 3) post-ROPS years 2006-2008 only. For these three views of the data, the respective spottail shiner mean whole body PCB concentrations were 3.21, 2.45, and 2.66 mg/kg for T1 to T19; and 3.6, 2.6, and 1.7 mg/kg for T20 to T72. Similarly, the tissue concentrations of PCBs in brown bullhead

and smallmouth bass were characterized as the current period and the post-ROPS years only. The respective mean fillet concentrations for brown bullhead were 4.86 and 1.78 mg/kg for T1 to T19, and 5.01 and 1.87 for T20 to T72; smallmouth bass were 1.95 and 1.18 mg/kg for T1 to T19, and 3.49 and 1.67 mg/kg for T20 to T72. Aquatic macroinvertebrate mean tissue total PCBs in freshwater mussel samples ranged from 0.03 to 0.06 mg/kg. These measurements were then used to estimate that total PCB concentrations in emerging insects would range from 0.11 to 0.24 mg/kg.

7.2.3 Effects Assessment

PCBs have been shown to cause lethal and sub-lethal effects in organisms. The ecological risk assessment limited its focus to adverse effects on survival, growth and reproduction. The ecological effects assessment includes literature reviews, field studies, and toxicity test data, linking contaminant concentrations to effects on ecological receptors.

Toxicity reference values (TRVs) were used to estimate the potential for ecological risk at the Site as a result of exposure to PCBs (see SRC/SERAS 2010 in administrative record). TRVs were selected based on Lowest Observed Adverse Effects Levels (LOAELs) and/or No Observed Adverse Effects Levels (NOAELs) from laboratory and/or field based studies reported in the scientific literature. The LOAEL is the “lowest” exposure level shown to produce adverse effects, and NOAELs are the highest exposure level at which an adverse effect was not observed. These TRVs reflect the effects of PCBs on the survival, growth, and reproduction of fish and wildlife species in the Grasse River. Effects on growth and reproduction (e.g., egg maturation and hatchability, survival of juveniles) are generally the most sensitive endpoints for animals exposed to PCBs.

7.2.4 Risk Characterization

Risk characterization is the final phase of the ERA process and the information on exposure and effects are integrated into a statement about risk to the assessment endpoints established during problem formulation. Risk Characterization estimates both current and future adverse ecological effects on survival, growth, and reproduction in the absence of remedial action. Generally, the hazard quotient method was used to characterize risks to the assessment endpoints by calculating the ratio of the exposure concentration of PCBs (measured or modeled) to the TRVs developed in the Effects Assessment. Hazard quotients less than 1.0 are assumed to indicate that adverse ecological effects are unlikely; HQs of 1.0 or greater are assumed to indicate that the PCBs may present unacceptable ecological risk.

Risk to fish was evaluated by comparing measured concentrations of PCBs and dioxin-like PCB congeners in fish tissue with concentrations reported in published studies that identified adverse effects to survival, growth, and reproduction. Additional characterization of risk to the generic assessment endpoint of aquatic organisms was conducted by calculating HQs from exposure concentrations of PCBs in sediment and water by comparing them to benchmarks of toxicity obtained from the literature.

Food chain models were used to calculate risk to upper trophic level piscivorous birds (belted kingfisher), mammals (mink), and insectivorous mammals (little brown bat) from consumption

of contaminated prey such as fish and aquatic invertebrates. For the food chain estimates of risks, the exposure parameters (e.g., body weight, prey ingestion rate, home range) used to calculate the concentrations or dietary doses to which the receptors of concern may be exposed were obtained from EPA sources and the scientific literature. Site-specific PCB concentrations in fish, aquatic invertebrates (estimated concentrations in emergent insects), and sediment were used to model the food-chain risks. The TRVs were selected based on LOAELs and NOAELs from laboratory and/or field-based studies as reported in the scientific literature.

The ERA indicated that aquatic organisms and piscivorous and insectivorous birds and mammals are above EPA's level of concern as a result of exposure to PCBs, and therefore the risks for adverse ecological effects to reproduction, growth, or survival from exposure to PCBs in sediments and/or prey are unacceptable.

The major findings of the ERA include:

- Sediment: Available information indicates unacceptable risks to aquatic organisms from exposure to the mean concentrations of Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260, total PCBs, and dioxin-like PCB congeners.
- Surface water: Available information indicates unacceptable risk to aquatic organisms from exposure to the mean measured concentrations of total PCBs and dioxin-like PCB congeners.
- Fish: Available information indicates unacceptable risks for adverse ecological effects (i.e., reduced survival, growth and/or reproduction) from exposure of fish to total PCBs and dioxin-like PCB congeners.
- Food chain: Unacceptable risks were estimated for piscivorous birds (belted kingfisher) and mammals (mink) from dietary exposure to Aroclors 1232, 1248, 1254, and 1260, and total PCBs. Potential risks to insectivorous mammals from dietary exposure to Aroclors 1248 and 1260 and total PCBs were uncertain.

7.2.5 Uncertainty

The process of evaluating ecological risks involves multiple steps. Inherent in each step are uncertainties that ultimately affect the final calculated risks. The nature and magnitude of uncertainties depend on the amount and quality of data available, the degree of knowledge concerning the site conditions, and the assumptions made to perform the risk assessment. Sources of uncertainty in the ERA are as follows:

Problem Formulation and Exposure Characterization include: Uncertainties are associated with exposure pathways that were not retained for quantitative evaluation; identification of ecological receptors; selection of representative species; data availability; exposure parameters used in the food chain models; exposure route assumptions; and, assumptions on the bioavailability of PCBs.

Effects Characterization: There is uncertainty associated with the selection of the TRVs from

laboratory and field animal studies. To minimize this uncertainty, EPA selected TRVs through a systematic critical review process to minimize the potential for under-estimating the toxicity of contaminants to the assessment endpoints. Literature searches were conducted to determine the chronic toxicity of PCBs to the indicator species. If no toxicity values could be located for the receptor species, values reported for a closely related species were used. When several toxicity values were reported for a receptor species, appropriately conservative values that resulted in ecologically significant adverse effects were used in the risk calculations. Toxicity values obtained from long-term feeding studies were preferred over those obtained from single dose oral studies. No other safety factors were incorporated into the TRVs development.

Risk Characterization: An HQ less than 1.0 does not indicate the absence of risk; however, it implies that adverse effects on survival, growth, or reproduction due to site contaminants are unlikely and, given the appropriately conservative nature of the ERA process, there is a high degree of confidence that the risk is minimal. The toxicity equivalency approach was used to evaluate risks from dioxin-like PCB congeners in sediment and surface water. This method is intended for use in estimating dietary exposure to dioxin-like chemicals, and therefore may overestimate the potential toxic potency of an abiotic environmental matrix where bioavailability is affected by partitioning to particles and organic carbon. Lastly, when PCBs were not detected in a particular sample analysis (*e.g.*, Aroclors, congeners), it was conservatively assumed that the concentration in that sample was one-half the reported detection limit. This uncertainty may have led to possible overestimation of some risks, particularly in the case of dioxin-like PCB congeners.

Overall, uncertainty in the ERA process was minimized by relying on site-specific data on PCB concentrations in sediment, water, and fish and invertebrate tissues. Current conditions were defined for the ERA to focus the use of available data, and segregation of non-baseline exposure data such as that associated with the 2001 CPS, 2003 ice scour, and 2005 ROPs events were considered within the ERA to further minimize uncertainty from the potential overestimation of risks.

Basis for Action

The excess cancer risk and non-cancer health hazards associated with human ingestion of fish, as well as ecological risks, including those associated with ingestion of fish by birds and mammals are above acceptable levels under baseline conditions. The response action selected in this Record of Decision is necessary to protect public health, welfare, or the environment from actual or threatened releases of hazardous substances into the environment.

EPA has identified Akwesasne as a Community with Environmental Justice Concerns, and the selected remedy includes a remedial goal that is specifically designed to protect the Mohawk community (see Sections 8 and 12). EPA investigations revealed that culturally the Akwesasne is a subsistence fishing/high fish consumption community and thus a fish ingestion rate of 142 grams/day was used in the risk assessment for the SRMT members (Forti et al, 1995), whereas fish ingestion rate used for the non-SRMT adults was 31.9 grams/day. The remedial goals for the SRMT and the non-SRMT adults were based on their individual ingestion rates *e.g.*, 142 grams/day and 31.9 grams/day, respectively. EPA utilized a fish ingestion rate that is specific to the Mohawk population in developing the remedial goal of 0.01 mg/kg PCBs in fish. This

remedial goal is designed to be protective of the Mohawk community that consumes fish from the Grasse River, and EPA will not deem the Site remedy to be complete until this goal is achieved (see Section 8).

8. REMEDIAL ACTION OBJECTIVES

Remedial action objectives are specific goals to protect human health and the environment. These objectives are based on available information and standards, such as applicable or relevant and appropriate requirements (ARARs), to-be-considered (TBC) guidance, and site-specific risk-based levels established using the risk assessments. There are no federal or New York State cleanup standards for PCB-contamination in sediment. The following remedial action objectives have been established for the Site:

1. **Reduce the cancer risks and non-cancer health hazards for people eating fish from the Grasse River by reducing the concentration of PCBs in fish.** The risk-based preliminary remediation goal (PRG) for the protection of human health is 0.05 mg/kg (wet weight) PCBs in fish fillet based on non-cancer hazard indices for the RME adult fish consumption rate of one half-pound meal per week (equivalent to 32 grams per day, this level is protective of cancer risks as well). The risk-based PRG for the protection of Mohawk human health is 0.01 mg/kg PCBs in fish fillet based on non-cancer hazard indices for the adult tribal subsistence population with a consumption rate of 142 grams per day. Interim target concentrations are 0.26 mg/kg PCBs in fish fillet, which is protective for cancer risks for the adult avid angler at a fish consumption rate of one half-pound meal per month and 0.36 mg/kg PCBs in fish fillet, which is protective of the CT or average angler, who consumes one half-pound meal every two months.
2. **Reduce the risks to ecological receptors by reducing the concentration of PCBs in fish.** The risk-based PRG for the ecological exposure pathway is a range in whole-body fish (brown bullhead and spottail shiner) PCB concentrations of 0.22 to 0.44 mg/kg (wet weight) based on the NOAEL and the LOAEL for consumption of fish by the mink. The ecological PRG is considered protective of all the ecological receptors evaluated because it was developed for the mink, the piscivorous mammal calculated to be at greatest risk from PCBs at the Site. In addition, a range from 0.1 to 0.2 mg/kg (wet weight) PCBs in brown bullhead fillet was developed based on the NOAEL and LOAEL for consumption of fish by the mink.
3. **Minimize the current and potential future bioavailability of the PCBs in sediments.** PCBs in sediments may become bioavailable by various mechanisms (e.g., pore water diffusion, bioturbation, biological activity, benthic food chains, ice jam event scour, etc). Minimizing the degree to which such mechanisms may make PCBs bioavailable (e.g., through removal or containment) will reduce PCB levels in biota and the associated risks to human health and the environment.
4. **Protect the ecosystem of the lower Grasse River.** The remedy will protect the ecosystem and replace and/or reconstruct habitat impacted by remedial activities in order to re-establish appropriate conditions for supporting the fish and wildlife of the river.

The remedy will be monitored for ecosystem recovery through the measurement and analysis of appropriate physical, chemical, and biological parameters.

5. **Minimize the long-term transport of PCBs from the lower Grasse River to the St. Lawrence River.** PCBs that are transported downstream in the water column are available to biota, contributing to the risks from the Site. Downstream transport also may move PCBs from contaminated areas to clean areas and from the lower Grasse River to the St. Lawrence River.

EPA has adopted the PRGs identified above as the final Remediation Goals (RGs) for the Site.

9. DESCRIPTION OF ALTERNATIVES

CERCLA § 121(b)(1), 42 U.S.C. § 9621(b)(1), requires remedial actions to be protective of human health and the environment, be cost-effective, and utilize permanent solutions and alternative treatment technologies and resource recovery alternatives to the maximum extent practicable. Section 121(b)(1) also establishes a preference for remedial actions which employ, as a principal element, treatment to permanently and significantly reduce the volume, toxicity, or mobility of the hazardous substances, pollutants and contaminants at a site. Further, CERCLA § 121(d), 42 U.S.C. § 9621(d), specifies that a remedial action must attain a level or standard of control of the hazardous substances, pollutants, and contaminants, which at least attains ARARs under federal and state laws, unless a waiver can be justified pursuant to CERCLA § 121(d)(4), 42 U.S.C. § 9621(d)(4).

During the initial development and screening of alternatives, several potentially applicable remedial technologies or process options for addressing PCB-contaminated sediments in the Grasse River were identified and screened (evaluated) based on effectiveness and technical implementability at the Site. Detailed descriptions of technologies, process options, and the ten remedial alternatives for addressing the contamination associated with the Site can be found in the AofA report. Retained technologies were then evaluated in a second screening based on effectiveness, implementability and cost. The AofA report also presented the results of mathematical modeling that was used to compare the projected time to achieve PRGs and interim target PCB concentrations in fish for the ten alternatives discussed in Section 9.3 (Description of Remedial Alternatives), below. With the exception of the No Further Action Alternative, all of these alternatives involve dredging, containment (capping), or monitored natural recovery, or combinations thereof.

9.1 Description of Remedy Components

9.1.1 *Containment Components*

Containment options are to isolate PCBs contained in the river from the water column and biota. Three capping technologies were considered for the alternatives at the Site:

- The Main Channel Cap considered in the AofA is 12 inches thick and composed of 50:50 sand and topsoil mix to be placed in two 6 inch lifts;

- The Armored Cap considered in the AofA is composed of 6 inches of sand/topsoil (50:50 mix) overlain by 6 inches of gravel filter layer, and then 13 inches of 3 to 10 inch diameter gravel/cobbles for armoring against scouring forces; and
- The Near Shore Cap considered in the AofA is a 6 inches thick and composed of 50:50 sand and topsoil mix.

9.1.2 Sediment Treatment

Sediment treatment can be performed in-situ (e.g., activated carbon application) or ex-situ (e.g., thermal desorption, biodegradation) to reduce levels and/or movement of PCBs. The in-situ treatment technology of activated carbon was retained initially and evaluated in the activated carbon pilot study that Alcoa conducted in the Grasse River in 2006, and which is discussed above in Section 2 (Site History and Enforcement Activities).

Treatment technologies such as thermal desorption are technically feasible; however, the associated costs would be substantially greater than on-site or off-site landfill disposal.

9.1.3 Sediment Removal, Dewatering, and Disposal

Both hydraulic and mechanical sediment removal technologies were considered in the AofA and have been utilized during the NTCRA and ROPS. However, for the selected remedy, the most appropriate and effective equipment will be determined during the design phase and utilized during construction.

Hydraulic dredges would move the dredged slurry through piping to a staging and processing area, whereas mechanically dredged sediments would be transported to the staging and processing location by barge or truck. At the processing area, the sediments would be dewatered using equipment such as plate and frame filter presses, followed by further processing by equipment such as a belt filter press, solid-bowl evaporator, hydrocyclone, and gravity thickener or settling basin, with the specific equipment to be determined during the design. Geotubes have also been utilized to dewater sediment at the Site, and may be used in the future.

Disposal in an on-site landfill was retained in the AofA for remedies that include dredging. Alcoa's on-site Secure Landfill meets the TSCA and RCRA requirements and can accept dredged materials containing PCBs at concentrations greater than 50 mg/kg and materials from the Grasse River Site. The current Secure Landfill configuration has a remaining permitted capacity to accommodate approximately 60,000 cy of in-situ sediment. Additional capacity of the Secure Landfill would require additional state and federal approvals. The cost estimates from the AofA assumed that the Secure Landfill design would be expanded to accommodate 100,000 cy of in-situ sediment.

9.1.4 Water Treatment

For water treatment, filtration and granular activated carbon was assumed. GAC was used during both the NTCRA and ROPS. However, for the selected remedy, the most appropriate and

effective equipment will be determined during the design phase and utilized during construction.

9.1.5 Ice Management

A pier type ice control structure was considered for ice management based on the results of physical and numerical model testing conducted for the Site. However, due to public safety concerns associated with the construction of piers in the river; it was not retained for further alternative evaluations. Armored capping is another form of ice management and it is discussed in the containment component section above.

9.1.6 Institutional Controls

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a response action. Institutional controls are typically designed to work by limiting land or resource use or by providing information that helps modify or guide human behavior at a site. Institutional controls are considered to be limited action alternatives, and therefore are not included under the No Action alternative. The implementation of institutional controls in the form of informational devices would be utilized with the MNR, capping and removal alternatives.

Currently, an informational institutional control in the form of fish consumption advisories is administered by the NYSDOH for the lower Grasse River. NYSDOH periodically reviews fish PCB data to ensure the advisories are up to date and considers whether the fish consumption advisories need modification. Other informational devices would include outreach programs to inform the public to limit activities that could compromise the integrity of the cap (such as dredging) and to promote knowledge of and voluntary compliance with the fish consumption advisories. Additionally, locations of the caps should be indicated on all appropriate maps. Institutional controls will be further refined and implemented during remedial design and after construction, as appropriate.

9.1.7 Monitoring Requirements

Short- and long-term (i.e., pre-, during, and post-construction) monitoring programs will be developed to ensure compliance with performance standards and to ensure protection of human health and the environment. The types and frequency of pre-construction monitoring will be developed during remedial design. Plans for monitoring during and after construction will be developed during the remedial design and modified during and after construction as appropriate (see Section 9.2 for common monitoring elements).

9.2 Common Elements

Listed below are elements that are common to all of the alternatives with noted exceptions:

- A Phase 1A Cultural Resource Survey will be conducted during the pre-remedial design prior to any disturbance and/or in-river work;

- Additional sampling and analysis of the relatively small area of floodplains present along the river will be performed concurrent with the design phase of the project to determine if additional actions are warranted in any of the floodplain areas;
- Segment length weighted average (SLWA) is used to identify PCBs at depth and is one of the criteria for triggering remediation in T1-T21 because of the potential for scour in those transects;
- The construction time for each alternative reflects only the time required to construct or implement the remedy and does not include the time required to design the remedy or procure contracts for design and construction;
- All alternatives define the near shore surface sediment depth as the top 12 inches and the main channel surface sediment depth as the top six inches (Refer to October 21, 2009 letter from EPA to Alcoa regarding surface sediment determination in the administrative record);
- Near shore is defined for purposes of the Site as the area starting at the mean high water level elevation contour at the shoreline of the Grasse River and extending to where the gentle bathymetric slope along the shoreline meets the steep slope of the main channel side walls. In general, the near shore areas have water depths of five feet or less during normal summer flow and extend approximately 25 feet from shore. Alternatives with dredging in near shore will include dredging of adjacent steep side slope to the depth parallel to the adjacent near shore depth;
- All alternatives with the exception of Alternatives 1 and 2 would include air monitoring to ensure that the remedy implementation is protective;
- EPA chose an action level of 1 mg/kg for PCBs in sediment based on the action level's projected ability to achieve EPA's PCB target concentrations in fish for protection of human health, and to achieve the remedial goal for PCBs in fish that is protective of ecological receptors. EPA notes that the 1 mg/kg action level is consistent with the cleanup levels selected by EPA for PCBs in St. Lawrence River and Raquette River sediments at the General Motors (Central Foundry Division) Superfund Site and in St. Lawrence River sediments at the Reynolds Metals Co. Superfund Site, both of which are located on the St. Lawrence River downstream of the confluence of the St. Lawrence and Grasse Rivers.
- Backfill, capping, and habitat material will be clean material. Acceptance criteria for clean backfill quality are that no organic chemicals shall be detected using the following analytical methods, and concentration of inorganics shall be below Site-specific local background levels or will meet the LEL of NYSDEC's sediment criteria for inorganics. Analytical methods to be used are (or most current revisions): TCL VOCs EPA SW-846 Method 8260B; TCL SVOCs EPA SW-846 Method 8270C; Pesticide/PCBs EPA SW-846 Method 8082; Herbicides EPA SW-846 Method 8150; TAL Metals EPA SW-846 Method 6000/7000 Series; Cyanide EPA SW-846 Method 9012;

- For cost estimating purposes, all alternatives with a dredging component assume the use of a hydraulic dredge for the main channel and use of a mechanical dredge for the near shore. For the dewatering process, the cost estimate assumed the use of plate and frame filter press, belt filter press, solid-bowl evaporator, hydrocyclone, and gravity thickener or settling basin. For water treatment, granular activated carbon was assumed. However, for the selected remedy, the most appropriate and effective equipment will be determined during the design phase and utilized during construction;
- For cost estimating purposes, all alternatives assumed the armored cap to be 25 inches thick and the main channel cap to be 12 inches of sand/topsoil cap as designed in the ROPS. However, during design, the composition and thickness of the capping material will be optimized to promote reliability and efficacy of the cap;
- For cost estimating purposes, all active remediation alternatives' total present worth are rounded numbers and include Routine Engineering Design (15% of Capital Cost) and Construction Contingency (25% of Capital Cost) and the present-worth costs were calculated using a discount rate of seven percent and a thirty-year time interval for the post-construction monitoring and maintenance period;
- For all alternatives where dredging is proposed, the cost estimate assumes up to 100,000 cy of in-situ dredged sediment will be disposed of in an existing on-site permitted TSCA/RCRA landfill. The cost estimates for alternatives with greater quantities of dredged material assume the volume exceeding 100,000 cy will be transported off-site for disposal at a permitted TSCA/RCRA landfill;
- All alternatives except Alternative 1 rely on institutional controls, such as outreach to promote knowledge of and voluntary compliance with the existing fish consumption advisories and to inform the public to limit activities that could compromise the integrity of the cap (such as dredging);
- For all alternatives except Alternative 1, the remedy would be monitored over the long-term. If monitoring reveals any portion of the caps has been eroded, damaged areas would require maintenance/replacement;
- As specified below, data will be reviewed or collected to demonstrate the effectiveness of the remedy in meeting the RAOs. In addition to meeting specific RAOs, data will be reviewed or collected to determine if the remedy is protective of human health and the environment:
 - Monitoring related to RAO1: Fish data collected during monitoring programs (e.g., remedial action monitoring, long-term monitoring) or additional data, as appropriate and necessary, will be reviewed and analyzed to determine if PCB concentrations in fish are decreasing and if the concentrations are expected to meet, have met, or continue to meet the RGs for humans in the expected timeframes;

- Monitoring related to RAO2: Fish data collected during monitoring programs (e.g., remedial action monitoring, long-term monitoring) or additional data, as appropriate and necessary, will be reviewed and analyzed to determine if PCB concentrations in fish are decreasing and if the concentrations are expected to meet, have met, or continue to meet the RGs for ecological receptors in the expected timeframes;
 - Monitoring related to RAO3: Data collected during the monitoring programs or additional data, as appropriate and necessary, will be reviewed and analyzed to determine if PCB concentrations in abiotic and biotic media (e.g., sediments, surface water, pore water, fish, and other biota) indicate that PCBs are sufficiently contained by the remedy to minimize PCB bioavailability. Additionally, data collection and analysis will be conducted to ensure the caps continue to remain in place. If any portion of a capped area has been eroded, monitoring and sampling will determine whether other areas have been contaminated with PCBs released from the damaged areas;
 - Monitoring related to RAO4: Physical, chemical, and biological data, collected during the monitoring programs or additional data, as appropriate and necessary, will be reviewed and analyzed to determine success of the remedy in providing for ecosystem recovery from the construction and contaminant impacts. Additionally, a monitoring program will be established to verify the attainment of the habitat replacement objectives, including evaluation of the re-construction materials and plantings; and,
 - Monitoring related to RAO5: All surface water monitoring data collected upstream, on-site and downstream during monitoring programs and additional data, as necessary and appropriate, (e.g., PCB flux, PCB concentration) will be reviewed to determine if the remedy has been effective in minimizing PCB transport via the water column.
- Monitoring will also be conducted if there are significant flood or ice-jam events observed in the river. An evaluation of the impacts of those events on the remedy will be initiated as soon as practicable and weather permitting after the event. This evaluation may include the collection and analysis of environmental samples;
 - For Alternatives 7 through 10, even though a great amount of sediment in the main channel is dredged, due to the Site conditions and based on information from Site-specific pilot studies and other dredging sites, it is anticipated that residual sediments with PCB concentrations greater than or equal to 1 mg/kg will remain, requiring an armored cap or main channel cap, as appropriate, after dredging;
 - All of the alternatives assume contaminants remaining on-site above levels that would allow for unrestricted use and unlimited exposure and, therefore, CERCLA requires that the Site be reviewed at least once every five years, indefinitely. Costs associated with

five-year reviews are included in all of the alternative present-worth cost estimates except for No Further Action Alternative 1; and,

- All of the alternatives, except Alternatives 1 and 2, include the development of a habitat reconstruction plan. The objective of the habitat reconstruction plan will be to identify impacts to habitat and species from the remedy, identify habitat re-establishment goals, provide design specifications for habitat recovery, and provide the scope for monitoring of habitat recovery. The plan will be developed and implemented during design and remedy implementation, will consider habitat and species management goals such as those stated in the NYS Comprehensive Wildlife Conservation Strategy, and will include the following components:
 - A. Habitat assessment study for affected species to assess the river for habitats that are present and use of the habitats by aquatic and semi-aquatic species. The study would include a survey for the presence of federal and state listed aquatic species and the habitats used by these species in the remedial area. Additionally, the study would document the habitat characteristics (including but not limited to temperature regime, substrate type, structure, plant species and density) of all areas affected by the remedy and identify any fish and wildlife concentration areas. Collected data would be used to determine the habitats affected by the remedy, any actions necessary to eliminate or minimize impacts to listed species, measures needed to protect existing habitats, and develop design specifications for the replacement and recovery of the all affected habitats following the remedy.
 - B. Placement of clean substrate on top of the cap to allow for habitat re-establishment and species use, except where the material placed for the cap would be of sufficient quality and thickness to allow for omitting an additional habitat layer. The design of the thickness of the habitat layer of the cap will include consideration of the potential for burrowing animals to compromise the integrity of the cap. The habitat recovery material will be free of contaminants and would not require significant maintenance once habitat has been re-established. After placement of the habitat recovery material, main channel areas should be returned to a stable condition. The backfill material to return the near shore to initial grade should be of appropriate material conducive to habitat recovery. The most appropriate substrate type will be determined based on the information collected during the habitat assessment and may vary depending on habitat re-establishment and species requirements or habitat reconstruction goals.
 - C. Design for restoration of vegetation. In areas disturbed by the remedy or implementation of the remedy, vegetation would be re-established through a mixture of appropriate active planting and seeding and passive measures to allow for healthy and diverse habitat. Vegetation placement would be determined during the design.
 - D. Monitoring habitat and biota recovery. A monitoring plan will assess the success of habitat re-construction materials, plantings, and recovery of biota. The monitoring plan will include baseline sampling and corrective actions pertaining

to habitat reconstruction, should they be necessary. Additionally, monitoring of PCBs in biota will be conducted to track the success of the remedy in reducing PCB concentrations in aquatic and semi-aquatic species in the areas affected by the remedy. A protocol will be developed to monitor the ecosystem recovery through the measurement of appropriate physical, chemical and biological parameters. NYSDEC's Standard Operating Procedure: Biological Monitoring of Surface Waters in New York State (NYSDEC 2012) will be considered during the development of the protocol, as will EPA guidance. The standard operating procedures will include planning, collection, assessment and reporting requirements to monitor the impact of the remedial action and ecosystem recovery.

9.3 Description of Remedial Alternatives

Alternative 1: No Further Action

Capital Cost:	\$0
Operation and Maintenance Costs (present-worth):	\$0
Present-Worth Cost:	\$0
Construction Time:	0 years

The Superfund program requires that the "no-action" alternative be considered as a baseline for comparison with the other alternatives. The no-action alternative does not include any physical remedial measures beyond those response actions already implemented to address the problem of sediment contamination at the Site.

Alternative 2: Monitored Natural Recovery

Capital Cost:	\$0
Operation and Maintenance Costs (present-worth):	\$3,400,000
Present-Worth Cost:	\$3,400,000
Construction Time:	0 years

The Monitored Natural Recovery (MNR) alternative relies on naturally occurring processes to reduce the toxicity, mobility, and volume of the contaminants in the lower Grasse River sediments. Natural recovery processes may include biodegradation, biotransformation, bioturbation, diffusion, dilution, adsorption, volatilization, chemical reaction or destruction, resuspension, downstream transport, and burial by cleaner material. Long-term monitoring of sediment, water column, and fish would be included in this alternative to confirm that contaminant reduction is occurring and that the reduction is achieving the Remedial Action Objectives.

Alternative 3: Capping

Capital Cost:	\$74,211,000
Operation and Maintenance Costs (present-worth):	\$10,200,000
Present-Worth Cost:	\$114,100,000

Construction Time:

3 years

This alternative includes:

- the placement of a near shore cap over sediments in the near shore areas between T1 and T21 (10 acres) with SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg;
- the placement of an armored cap over the T1-T21 main channel sediments (59 acres) where either the segment length weighted average (SLWA) or the maximum surface sediment PCB concentration is greater than or equal to 1 mg/kg;
- the placement of a near shore cap over sediments in the near shore areas between T21 and T72 (31 acres) with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg; and,
- the placement of a main channel cap over main channel sediments between T21 and T72 (approximately 225 acres) with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg. (Refer to Table 10-2 below in the Reduction in Toxicity, Mobility, or Volume Through Treatment section for estimated volumes dredged and areas capped.)

Alternative 4: T1-T21 Near Shore Dredging and Backfill to Grade, T21-T72 Near Shore Capping, T1-T21 Main Channel Armored Capping and T21-T72 Main Channel Capping

Capital Cost:	\$97,588,968
Operation and Maintenance Costs (present-worth):	\$10,600,000
Present-Worth Cost:	\$147,200,000
Construction Time:	3 years

Alternative 4 includes:

- dredging of near shore sediment between T1 and T21 with SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade;
- the placement of an armored cap over the T1-T21 main channel sediments where either the SLWA or the maximum surface sediment PCB concentrations is greater than or equal to 1 mg/kg;
- the placement of a near shore cap over sediments in the near shore areas between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg; and
- the placement of a main channel cap over main channel sediments between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg.

This alternative includes approximately 59 acres of armored cap, 225 acres of main channel cap, 31 acres of near shore cap, 26,000 in-situ cy of sediment dredged in the near shore followed by backfilling to pre-dredging grade in the dredged area.

Alternative 5: T1-T72 Near Shore Surface Sediment PCBs \geq 10 mg/kg Dredging and Capping between 1 mg/kg and 10 mg/kg, T1-T21 Main Channel Armored Capping and T21-T72 Main Channel Capping

Capital Cost:	\$117,274,756
Operation and Maintenance Costs (present-worth):	\$11,000,000
Present-Worth Cost:	\$175,200,000
Construction Time:	4 years

Alternative 5 includes:

- dredging of near shore sediment between T1 and T21 with SLWA or maximum surface sediment PCB concentrations greater than or equal to 10 mg/kg, followed by 6-inch capping of near shore sediment between T1 and T21 with PCB concentrations greater than or equal to 1 mg/kg and less than 10 mg/kg;
- the placement of an armored cap over the T1-T21 main channel sediments where either the SLWA or the maximum surface sediment PCB concentration is greater than or equal to 1 mg/kg;
- dredging of near shore sediment between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 10 mg/kg, followed by 6-inch capping of near shore sediment between T21 and T72 with PCB concentrations greater than or equal to 1 mg/kg and less than 10 mg/kg; and,
- the placement of a main channel cap over main channel sediments between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg.

This alternative includes 59 acres of armored cap, approximately 225 acres of main channel cap, 31 acres of near shore cap, 46,000 in-situ cy of sediment dredged in the near shore and 13 acres backfilled to grade. The 28 acres of the remaining near shore area between T1 and T72 that is not addressed by dredging/backfilling would be capped.

Alternative 6: T1-T72 Near Shore Dredging and Backfill to Grade, T1-T21 Main Channel Armored Capping and T21-T72 Main Channel Capping

Capital Cost:	\$165,240,123
Operation and Maintenance Costs (present-worth):	\$11,800,000
Present-Worth Cost:	\$243,100,000
Construction Time:	4 years

Alternative 6 includes:

- dredging of near shore sediment between T1 and T21 with SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade;
- the placement of an armored cap over the T1 to T21 main channel sediments where either the SLWA or the maximum surface sediment PCB concentrations is greater than or equal to 1 mg/kg;
- dredging of near shore sediment between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade; and,
- the placement of a main channel cap over main channel sediments between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg.

This alternative includes 59 acres of armored cap, approximately 225 acres of main channel cap, 109,000 in-situ cy of sediment dredged in the near shore and 41 acres backfilled to grade.

Alternative 7: T1-T72 Near Shore Dredging and Backfill to Grade, T1-T19.5 Select Main Channel Dredging, T1-T21 Main Channel Armored Capping, and T21-T72 Main Channel Capping

Capital Cost:	\$242,746,364
Operation and Maintenance Costs (present-worth):	\$11,800,000
Present-Worth Cost:	\$351,600,000
Construction Time:	5 years

Alternative 7 includes:

- dredging of near shore sediment between T1 and T21 with SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade;
- dredging of main channel sediments from Work Zones 2 and 3 (approximately T7.5 to T9.5) defined in the ROPS and from T16.5 to T19.5, followed by placement of an armored cap over the dredged portion of the main channel sediments where residuals sediment PCB concentrations are greater than or equal to 1 mg/kg;
- the placement of an armored cap over remaining sediments in the main channel between T1 and T21 with SLWA or maximum sediment PCB concentrations greater than or equal to 1 mg/kg;
- dredging of near shore sediment between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade; and,
- the placement of a main channel cap over main channel sediments between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg.

This alternative includes 150,000 in-situ cy of sediment dredged from main channel, 59 acres of armored cap, approximately 225 acres of main channel cap, 109,000 in-situ cy of sediment dredged in the near shore and 41 acres backfilled to grade.

Alternative 8: T1-T21 Near Shore Dredging and Backfill to Grade, T1-T21 Main Channel Dredging and Armored Capping Residuals, and T21-T72 Near Shore and Main Channel Capping

Capital Cost:	\$269,569,253
Operation and Maintenance Costs (present-worth):	\$10,600,000
Present-Worth Cost:	\$388,000,000
Construction Time:	8 years

Alternative 8 includes:

- dredging of main channel and near shore between T1 to T21 with SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by placement of an armored cap over the dredged portion of the main channel sediments where residuals sediment PCB concentrations greater than or equal to 1 mg/kg;
- the placement of backfill to grade in the dredged near shore;
- the placement of a near shore cap over sediments in the near shore areas between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1

mg/kg; and,

- the placement of a main channel cap over main channel sediments between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg.

This alternative includes 329,000 in-situ cy of sediment dredged from the main channel, 59 acres of armored cap, approximately 225 acres of main channel cap, 26,000 in-situ cy of sediment dredged in the near shore and 10 acres backfilled to grade, and an additional 31 acres of near shore would be capped.

Alternative 9: T1-T72 Near Shore Dredging and Backfill to Grade, T1-T46 Select Main Channel Dredging, T1-T21 Main Channel Armored Capping, and T21-T72 Main Channel Capping

Capital Cost:	\$411,876,092
Operation and Maintenance Costs (present-worth):	\$11,900,000
Present-Worth Cost:	\$588,500,000
Construction Time:	7 years

Alternative 9 includes:

- dredging of near shore sediment between T1 and T21 with SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade;
- dredging of main channel sediments from Work Zones 2 and 3 (approximately T7.5 to T9.5) as defined in the ROPS and from T16.5 to T19.5, T27 to T37, and T43 to T46;
- the placement of an armored cap over the dredged portion of the main channel sediments where the residual sediment PCB concentration is greater than or equal to 1 mg/kg;
- the placement of an armored cap over remaining undredged sediments in the main channel between T1 and T21 with SLWA or maximum sediment PCB concentrations greater than or equal to 1 mg/kg;
- dredging near shore sediment between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade; and,
- the placement of a main channel cap over main channel sediments (undredged and residuals) between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg.

This alternative includes 525,000 in-situ cy of sediment dredged from the main channel, 59 acres of armored cap, approximately 225 acres of main channel cap, 109,000 in-situ cy of sediment dredged in the near shore and 41 acres backfilled to grade.

Alternative 10: T1-T72 Near Shore Dredging and Backfill to Grade, T1-T72 Main Channel Dredging, T1-T21 Main Channel Armored Capping, and T21-T72 Main Channel Capping

Capital Cost:	\$901,159,968
Operation and Maintenance Costs (present-worth):	\$11,900,000
Present-Worth Cost:	\$1,273,500,000
Construction Time:	18 years

Alternative 10 includes:

- dredging areas of the main channel and near shore between T1 to T21 which have SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg;
- backfilling the dredged near shore area between T1 to T21 to grade;
- the placement of an armored cap over the dredged portion of the main channel sediments between T1 and T21 with PCB residuals of greater than or equal to 1 mg/kg;
- dredging of near shore sediment between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade;
- dredging sediments in the main channel between T21 to T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg; and,
- the placement of a main channel cap over dredged portions of the main channel between T21 and T72 with residuals greater than or equal to 1 mg/kg.

This alternative includes 1,555,000 in-situ cy of sediment dredged from the main channel, 59 acres of armored cap, approximately 225 acres of main channel cap, 109,000 in-situ cy of sediment dredged in the near shore and 41 acres backfilled to grade.

10. COMPARATIVE ANALYSIS OF ALTERNATIVES

In selecting a remedy for a site, EPA considers the factors set forth in CERCLA § 121, 42 U.S.C. § 9621, by conducting a detailed analysis of the viable remedial alternatives pursuant to the NCP at 40 C.F.R. § 300.430(e)(9), EPA's *Guidance for Conducting Remedial Investigations and Feasibility Studies*, OSWER Directive 9355.3-01, and EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, OSWER 9200.1-23.P. The detailed analysis consists of an assessment of the individual alternatives against each of the nine evaluation criteria at 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis focusing upon the relative performance of each alternative against those criteria.

A comparative analysis of these alternatives based upon the nine evaluation criteria noted below follows.

Threshold Criteria - *The first two Superfund criteria are known as "threshold criteria" because they are the minimum requirements that each response measure must meet in order to be eligible for selection as a remedy.*

10.1 Overall Protection of Human Health and the Environment

Overall protection of human health and the environment determines whether an alternative eliminates, reduces, or controls threats to public health and the environment through institutional controls, engineering controls, or treatment.

Overall protection of human health and the environment at the Site would be achieved by reducing the PCB concentrations in fish and other biota. To accomplish this reduction, remedial alternatives need to address the diffusive flux of PCBs from surface sediments, and control

sediment stability through dredging, capping, and natural recovery. Each of the alternatives presented, except Alternative 1 (No Further Action) and Alternative 2 (Monitored Natural Recovery), would provide some level of protection of human health and the environment through a combination of active remediation and monitored natural recovery. Alternative 1 (No Further Action) would not be protective of human health and the environment since it would not address the PCBs in the sediments, which present human health and ecological risks.

Alternative 2 (Monitored Natural Recovery) relies on natural processes such as sedimentation to cover the surface sediment with cleaner sediment from upstream, in order to reduce the PCB concentration at the sediment surface and reduce risk. However, periodic ice jam-related scour events could result in remobilization of PCBs and would therefore present a continued risk to human health and the environment even after cleaner sediments are deposited over the PCBs. Also, because of the Grasse River’s slow sedimentation rate, EPA does not believe that the sedimentation alone will effectively control PCB flux from the sediments for many years.

Alternative 3 (Capping) relies on effective cap placement, thickness, stability and maintenance to isolate PCB-containing sediments, while Alternatives 4 through 10 rely on a combination of dredging and capping, followed by monitoring and maintenance of the caps, for the protection of human health and the environment. Dredging generally relies upon effective removal of contaminated sediment and low PCB residual concentrations. For the main channel, none of the alternatives presented rely solely on dredging because the residuals would most likely exceed the PCB sediment action level of 1 mg/kg, thus requiring the main channel to be capped even after dredging.

The projected approximate times that it would take under each of the alternatives to reach the fish RG and the interim target concentrations in the Remedial Action Objectives have been modeled and are provided on Table 10-1, below.

Table 10-1: Approximate Time (years) to Reach Target Concentration (mg/kg) in Fish			
Alternatives	0.05 mg/kg	0.26 mg/kg	0.36 mg/kg
1. No Further Action	> 30	> 30	> 30
2. MNR	> 30	> 30	> 30
3. Capping	> 30	7	6
4. T1-T21 NS Dredge and Backfill, T21-T72 NS Capping, and T1-T72 MC Capping	> 30	7	6
5. T1-T72 NS Surface Sediment PCBs > 10 mg/kg Dredge and Cap between 1 mg/kg and 10 mg/kg, and T1-T72 MC Cap	> 30	8	7
6. T1-T72 NS Dredge and Backfill, T1-T72 MC Capping	> 30	8	7
7. T1-T72 NS Dredge and Backfill, T1-T19.5 Select MC Dredge and Cap Residuals, and Rest of MC Capping	> 30	14	10
8. T1-T21 NS Dredge and Backfill, T1-T21 MC Dredge and Cap Residuals, and T21-T72 NS and MC Capping	> 30	19	13
9. T1-T72 NS Dredge and Backfill, T1-T46 Select MC Dredge and Cap Residuals, and Rest of MC Capping	> 30	17	13
10. Dredging/Capping	> 30	23	20

Note: “>” = greater than

The fish RG is 0.05 mg/kg PCBs (wet weight) in fillet. The fish RG to protect Mohawk human health is 0.01 mg/kg. The difference is attributable to the fish consumption rate used in the calculation for the Mohawk population, which is greater than the average fish consumption rate of the non-Mohawk adult population. EPA will consider the remediation to be completed when the remedial goal for Mohawk fish consumption (0.01 mg/kg) is achieved. In accordance with CERCLA, monitoring and review to ensure effectiveness of the remedy will continue indefinitely since hazardous waste will remain at the Site at levels that do not allow for unlimited use and unrestricted exposure. EPA has identified an interim target concentration of 0.26 mg/kg PCBs in fillet based on the average consumption rate of one half pound meal per month, and another interim target concentration of 0.36 mg/kg based on the average consumption rate of one half pound meal every two months. Currently, the fish consumption advisory is established as “eat none” for the lower Grasse River.

Alternatives 2 through 10 are projected to provide reduced PCB concentrations in fish over variable time frames, and therefore offer varying degrees of protection of human health and the environment. Alternatives 3 through 10, which include measures to prevent remobilization of PCBs in the main channel sediment vulnerable to ice jam-related scour would provide greater protection than Alternatives 1 and 2.

As can be seen in Table 10-1, none of the alternatives are projected to meet the human health RG of 0.05 mg/kg PCBs in fish tissue within the 30-year modeling time frame. Because capping can be performed more quickly than dredging, the alternatives with the greatest amounts of dredging take longer to achieve the other target concentrations, because fish will continue to be exposed to PCBs in the sediment over the longer construction time frame. Though it was not modeled, none of the alternatives are anticipated to meet the Mohawk human health RG of 0.01 mg/kg within the 30-year modeling time frame, because it is lower than the fish tissue level of 0.05 mg/kg.

The risk-based RG for the ecological exposure pathway is a range in whole-body fish (brown bullhead and spottail shiner) PCB concentrations of 0.22 to 0.44 mg/kg (wet weight) based on the NOAEL and the LOAEL for consumption of fish by the mink. And based on the approximate time to reach interim targets (0.26 and 0.36 mg/kg) as shown on Table 10-1, the active remedies presented in Alternatives 3 through 10 are expected to provide substantial ecological risk reduction in less than the 30-year modeling time frame compared to Alternative 1 and 2.

All of the active remedies presented in Alternatives 3 through 10 are expected to provide substantial risk reduction compared to Alternatives 1 and 2, which provide no active cleanup of the river. Alternatives 4, 5, and 6 show the best predicted combined short- and long-term risk reduction.

10.2 Compliance with ARARs

Section 121 (d) of CERCLA and NCP §300.430(f)(1)(ii)(B) require that remedial actions at CERCLA sites at least attain legally applicable or relevant and appropriate Federal and State requirements, standards, criteria and limitations which are collectively referred to as “ARARs,”

unless such ARARs are waived under CERCLA section 121(d)(4).

Compliance with ARARs addresses whether a remedy will meet all of the applicable or relevant and appropriate requirements of other Federal and State environmental statutes or provides a basis for invoking a waiver.

The federal chemical-specific ARARs for PCBs in the water column are 0.001 µg/L under the federal Clean Water Act (CWA) ambient water quality criterion for navigable waters, and 0.014 µg/L under the federal CWA criterion continuous concentration (CCC) [chronic] for freshwater aquatic life. The NYS surface water quality standards for PCBs are 0.12 ng/L for protection of wildlife and 0.001 ng/L for protection of human consumers of fish.

Alternatives 3 through 10 would meet the CWA ambient water quality criterion of 0.001 ug/l, and the CWA CCC of 0.014 ug/l. However, all alternatives would require a technical impracticability waiver for the NYS surface water standard of 0.12 ng/l for protection of wildlife, and the 0.001 ng/l NYS standard for protection of human consumers of fish. This is because PCBs are present in the Grasse River upstream of the Site at concentrations exceeding these standards, as described in Section 5.3.2 above.

Because there is no active remediation associated with the sediment for Alternatives 1 and 2, action-specific and location-specific ARARs do not apply. Alternatives 3 through 10 would comply with action-specific ARARs (e.g. CWA Sections 404(b) and (c); TSCA, 15 U.S.C. § 2605 and 40 C.F.R. Part 761; Solid Waste Disposal Act § 6924; Section 10 of the Rivers and Harbors Act; New York State ECL Article 3, Title 3 and Article 27, Titles 7 and 9) and location-specific ARARs (e.g., Endangered Species Act; Fish and Wildlife Coordination Act; and, National Historic Preservation Act; Coastal Zone Management Act). With regard to the location-specific ARARs of New York State ECL Article 15, Title 5, Article 17, Title 3 and 6 NYCRR Part 608 (refer to Table 13-3 under Use and Protection of Waters with respect to CWA Section 401), Alternatives 6, 7, 9 and 10 are expected to be more likely to meet these ARARs because they do not alter the bathymetry of the Grasse River to the same extent as Alternatives 3, 4, 5 and 8 because Alternatives 6, 7, 9 and 10 do not include capping that alters the near-shore bathymetry. Additional assessment of remedial impacts will be necessary to determine the precise actions necessary for the selected remedy to meet the substantive requirements of the location-specific ARAR of New York State ECL Article 11 Title 5 (New York State Endangered Species Act) and 6 NYCRR Part 182. A more detailed analysis of potential effects on wetlands and floodplains associated with the selected remedy would be performed during the remedial design, as necessary to ensure compliance with Executive Orders 11990 (Protection of Wetlands), 11988 (Floodplain Management), NYS ECL Article 24, and 6 NYCRR Part 663. More details and the full list of ARARs, TBCs and other guidelines are available in Tables 13-1 through 13-3.

EPA and the SRMT have extensively discussed, on a government-to-government basis, whether to apply the SRMT's sediment cleanup standard for PCBs (0.1 mg/kg) as "relevant and appropriate" or "to be considered" for the cleanup. As noted above, the United States maintains that land reserved to the SRMT by the 1796 Treaty includes the Indian Meadows along the banks of the lower Grasse River, and EPA, of course, subscribes to the United States' position regarding the Indian Meadows. The status of the lands reserved by the 1796 Treaty is currently

in dispute. See *Canadian St. Regis Band of Mohawk Indians v. State of New York, et al.*, 5:82-cv-783 (N.D.N.Y.).

EPA evaluated the SRMT sediment standard as a “to-be-considered” requirement for the Grasse River cleanup. EPA’s decision to evaluate the SRMT standard as a TBC was solely for purposes of developing the remedy, and was unrelated to the status of the SRMT’s land claim. The SRMT sediment standard was considered when EPA established a remediation goal for PCBs in fish that is protective of Mohawk health, although it is not being adopted as the cleanup standard for the sediment. EPA notes that the SRMT cleanup standard is significantly lower than EPA’s action levels for sediment cleanup (i.e., >1 mg/kg PCB surface or SLWA concentration) in this Record of Decision, and analyses performed by Alcoa at EPA’s request and included in the administrative record concluded that it is not technically practicable to achieve the SRMT’s sediment cleanup level of 0.1 mg/kg.

Primary Balancing Criteria - *The next five Superfund criteria, 3 through 7, are known as “primary balancing criteria.” These five criteria are factors with which tradeoffs between response measures are assessed so that the best option will be chosen, given site-specific data and conditions.*

10.3 Long-Term Effectiveness and Permanence

Long-term Effectiveness and Permanence considers the ability of an alternative to maintain protection of human health and the environment over time.

10.3.1 Reduction of Residual Risk

The No Further Action and MNR alternatives (Alternatives 1 and 2, respectively) remove no PCBs from the Grasse River and include no active measures to reduce residual risk at the Site. Under both alternatives, the degraded condition of surficial sediment and surface water quality will continue for decades, with no improvements other than from sedimentation. Neither option would prevent mobilization of PCBs in the main channel sediments that are vulnerable to ice jam-related scour. Each of these alternatives therefore would allow for the continued exposure to PCB contamination over the long-term.

Alternative 3 actively reduces residual risk by isolating PCBs in surface sediment under a cap. Alternatives 4 through 10 all reduce residual risk through various combinations of dredging and capping. Alternatives 3 through 10 provide similar long-term risk reduction. Removal of PCB-contaminated sediment if done completely such that no sediments with PCB concentrations above 1 mg/kg remain is considered more permanent than capping, which requires long-term maintenance of the cap. Complete removal of PCB-contaminated sediment is possible in the near-shore, but cannot be achieved in the main channel under any of the action alternatives due to site-specific conditions. The alternatives with greater amounts of dredging are also projected to take longer to achieve the RGs and RAO interim targets for PCBs in fish (0.26 mg/kg PCBs in fillet based on the average consumption rate of one half pound meal per month, and 0.36 mg/kg based on the average consumption rate of one half pound meal every two months) because

capping can be more quickly implemented than dredging. PCB resuspension from dredging would also delay achievement of the RAO interim targets.

10.3.2 Adequacy and Reliability of Controls

Sediment capping, sediment removal (dredging and excavation), habitat replacement/backfilling, and off-site disposal/treatment of removed sediments are all reliable and proven technologies. Proper design, placement, and maintenance of the caps are required for their effectiveness, continued performance, and reliability. Cap monitoring and maintenance programs would provide for reasonable reliability, and any TSCA/RCRA-permitted landfills into which dredged PCBs are placed also would be monitored and maintained over the long-term. The fish consumption advisories would continue to provide some measure of protection of human health until PCB concentrations in fish are reduced to the point where the fish consumption advisories can be relaxed or lifted.

Neither the No Further Action nor the MNR Alternative includes any engineering controls to address PCB contamination at the Site. Alternatives 3 through 10 all reduce exposure to PCBs in surface sediments and improve water quality through active measures. The alternatives that have a dredging component in the main channel (Alternatives 7 through 10) will permanently remove various volumes of sediment and the associated mass of PCBs from the river. Active Alternatives 3 through 10 also rely on capping for long-term effectiveness. Alternatives 3 through 10 all include placement of an armored cap to provide a long-term effective means of sequestering the PCB-contaminated sediments buried beneath the main channel in areas prone to scour from severe ice jam events, and also rely on the main channel cap in the lower T21 to T72 transects to address the availability of PCBs in main channel sediments. After careful evaluation, EPA concluded that an armored cap can reliably contain PCB contaminated sediments over the long-term in the scour-prone transects of the river.

Evaluations of propeller wash and scour from recreational boats and placement of anchors on the cap show that these activities are not expected to significantly impact the overall stability of a main channel cap or an armored cap; however, institutional controls in the form of informational devices to inform the public to limit activities that could compromise the integrity of the cap (such as dredging) and long-term monitoring would be necessary to ensure long-term integrity of the cap.

PCBs isolated under the cap would migrate into the cap very slowly via molecular diffusion, and the fastest reasonably foreseeable migration rate would still be slower than the rate at which sediments will naturally accumulate on top of the cap. Molecular diffusion is therefore not expected to compromise the effectiveness of the cap.

Dredging in the near shore under Alternatives 4 through 6 would be more effective than dredging in the main channel because contaminated near shore sediment can be fully captured by dredging, as demonstrated by the ROPS. Alternatives 4 and 5 will each leave behind greater near shore contamination (albeit under a cap) than Alternative 6. Therefore, Alternatives 6, 7, 9 and 10, which include the most near shore dredging, would be more effective and permanent in re-establishing valuable habitat for varied species in the near shore than Alternatives 3, 4, 5, and 8, which include capping in the near shore. Near shore areas that are dredged will be backfilled

with clean material to grade to provide appropriate depth of sediment to allow for habitat re-establishment and species use.

10.4 Reduction in Toxicity, Mobility, or Volume Through Treatment

Reduction in Toxicity, Mobility, or Volume of Contaminants through Treatment evaluates an alternative's use of treatment to reduce the harmful effects of principal contaminants, their ability to move in the environment and the amount of contamination present.

Alternatives	Dredging Volume in Main Channel (cy)	Area Capped in Main Channel (acre)	Dredging Volume in Near Shore (cy)
1. No Further Action	0	0	0
2. MNR	0	0	0
3. Capping	0	284	0
4. T1-T21 NS Dredge and Backfill, T21-T72 NS Capping, and T1-T72 MC Capping	0	284	25,900
5. T1-T72 NS Surface Sediment PCBs > 10 mg/kg Dredge and Cap between 1 mg/kg and 10 mg/kg, and T1-T72 MC Cap	0	284	46,100
6. T1-T72 NS Dredge and Backfill, T1-T72 MC Capping	0	284	108,700
7. T1-T72 NS Dredge and Backfill, T1-T19.5 Select MC Dredge and Cap Residuals, and Rest of MC Capping	149,600	284	108,700
8. T1-T21 NS Dredge and Backfill, T1-T21 MC Dredge and Cap Residuals, and T21-T72 NS and MC Capping	329,000	284	25,900
9. T1-T72 NS Dredge and Backfill, T1-T46 Select MC Dredge and Cap Residuals, and Rest of MC Capping	524,500	284	108,700
10. Dredging/Capping	1,554,000	284	108,700

The No Further Action and MNR alternatives do not involve any containment or removal of contaminants from the Site. Both rely on natural attenuation processes such as burial (sedimentation) by cleaner sediments to reduce the concentration of PCBs in the sediment and surface water. Mobility is not reduced by Alternatives 1 and 2 because neither alternative sequesters and protects sediment in the main channel that is susceptible to scouring from severe ice jam events, nor neither actively retards the flux of PCBs from the sediment to the water column.

Alternatives 4 through 10 will permanently remove various volumes of sediment from the river (see Table 10-2 above) through dredging, although not through treatment. Dredged sediment would be transported to and disposed of at an existing on-site TSCA/RCRA landfill and/or off-site to a permitted TSCA/RCRA landfill. Alternatives 4 through 10 will include treatment of

¹⁰ The area to be capped in the near shore for Alternative 3 is 41 acres, for Alternative 4 is 31 acres. Alternatives 1, 2, 6-10 include no capping in the near shore. The area to be backfilled in the near shore after dredging for Alternative 4 is 10 acres, for Alternatives 6-10 is 41 acres. Alternative 5 has some dredging in the near shore, however since the dredging is to 10 ppm and not to a 1ppm cleanup level, the activity after dredging is capping and not backfill. Alternative 5 has 41 acres to be capped after dredging.

water generated by the dredging and sediment handling processes to meet NYSDEC discharge limits prior to discharge.

Placement of caps, which is a component of Alternatives 3 through 10, would provide reduction of mobility of the contaminated sediment in the river through isolation of PCBs contained beneath the cap, not through treatment. EPA does not believe that treatment of the sediments is practicable or cost effective given the widespread nature of the sediment contamination in the Grasse River and the high volume of sediment that is being addressed.

In active Alternatives 3 through 10, after construction of the remedy is completed, sedimentation will provide further (but slower) reductions in the toxicity of PCBs in the remaining sediment and surface water.

10.5 Short-Term Effectiveness

Short-term Effectiveness considers the length of time needed to implement an alternative and the risks the alternative poses to workers, residents and the environment during implementation.

The No Further Action and MNR alternatives (Alternatives 1 and 2) do not involve any capping, dredging, or other construction activities that could present a risk to workers or the public. In addition, neither alternative increases the potential for direct contact with or ingestion and inhalation of PCBs from the surface water and sediment.

For the remaining alternatives, Alternative 3, which relies on capping and MNR, would have the lowest short-term impact to the workers, the environment, and the community based on the construction duration (three years) and minimal exposure to contaminated sediment at depth. Some of the impacts associated with Alternative 3 would include disruption to recreational boating, road congestion from vehicles needed to bring equipment, materials and workers to the Site, and short-term ecosystem impacts from cap placement. A typical construction season includes six months for the in-river construction season (May – October) plus a month before and after the construction season for mobilization/demobilization.

Alternatives 4 through 6 are expected to have greater short-term impacts than Alternatives 1 through 3, but fewer short-term impacts than Alternatives 7 through 10, which include significant amounts of main channel dredging. The estimated construction durations are from three to four years and the short-term impacts would include the impacts outlined above for Alternative 3 (Capping). Additionally, since Alternatives 4, 5, and 6 include dredging, resuspension and release of PCBs in the river will likely increase PCB concentrations in the water column and fish tissue during the in-river remedial operations and for a short period of time after dredging; however, experience at other sites has shown that while fish tissue concentrations often increase during dredging projects, the fish tissue concentrations return to pre-dredging concentrations and then generally decline within a few years after dredging ends. Also with dredging, additional transportation congestion would occur on the river from transporting up to 100,000 cy of dredged material to the on-site landfill.

Alternatives 7 through 9 have greater short-term impacts than all alternatives except Alternative 10. Impacts would be similar to those outlined for Alternatives 4 through 6, except impacts

would occur over longer construction duration, 5 to 8 years. The higher dredging volumes of Alternatives 7 through 10 will result in more PCBs being resuspended than under Alternatives 4 through 6. Also, the larger volume of sediment requiring disposal at an off-site landfill would mean increased truck traffic on the road beyond the on-site disposal facility and the Site.

Alternative 10 has the highest short-term impacts from dredging and capping because it has the longest time frame for construction (18 years¹¹). The magnitude of potential short-term impacts associated with dredging would increase greatly for this alternative in all respects (environmental impacts, community impacts, and worker safety) because of the dredge volume (approximately 1,663,000 in-situ cy) and duration.

The risks to remediation workers and nearby populations under all of the active alternatives would be mitigated by following appropriate health and safety protocols, by exercising sound engineering practices, and by utilizing proper protective equipment. Work areas in the river would be isolated (access restricted), with an adequate buffer zone so the recreational water craft can safely avoid such areas.

There may be some short-term temporary impacts to aquatic and wildlife habitat, particularly in the near shore for Alternatives 4 through 10, as a result of temporary habitat removal through dredging. Habitat replacement/backfilling measures would be implemented to mitigate these impacts. A monitoring program would be established to verify the attainment of the habitat re-establishment goals and objectives set during the remedial design. A habitat assessment and survey for listed or sensitive species and a use study for general species would be conducted during remedial design.

10.6 Implementability

Implementability addresses the technical and administrative feasibility of a remedy from design through construction and operation. Factors such as availability of services and materials, administrative feasibility and coordination with other governmental entities are also considered.

In general, all of the alternatives are considered to be technically feasible within the lower Grasse River. Design and implementation of both capping and dredging are administratively feasible, as no permits are required for in-river activities (although such activities would comply with substantive requirements of otherwise required permits), and construction would be performed in accordance with ARARs. Permits would be obtained as needed for off-site work.

There are no implementability issues for the No Further Action and MNR alternatives, which do not involve any active remediation.

Based on site-specific experience during the CPS and ROPS, the design and placement of armored, main channel, and near shore caps/backfill (components of all active remedial

¹¹ Construction time frame is anticipated to be 18 years because even though Alternative 10 has a much greater dredging volume (a million cy more than Alternative 9), the cost estimates anticipated the same number of dredging and capping equipments for Alternatives 3 through 10 to minimize re-contaminating adjacent dredged or capped areas.

alternatives) are expected to be technically implementable. Some of the larger dredging alternatives (Alternatives 7 through 10) would require significant off-site landfill capacity for the dredged sediments. Since all of the active alternatives require significant quantities of capping material, coordination with multiple cap material sources may be required to support the project. Alternative 10, which requires the greatest amount of dredging, has a greater uncertainty regarding the local availability of necessary materials, equipment, supplies, and services including landfill capacity and capping materials over the extended project period.

Dredging of various sediment volumes is a component of Alternatives 4 through 10. Operational problems with the hydraulic horizontal auger dredge were encountered during the NTCRA and ROPS in the main channel area. The presence of complex site bottom conditions and debris is expected to reduce the practicability and/or efficiency of removing sediment from targeted main channel areas in Alternatives 7 through 10. These limitations would be present for all main channel dredging alternatives; Alternatives 4, 5, and 6 do not include any main channel dredging.

Unlike dredging in the main channel, dredging in the near shore under Alternatives 4 through 10 would be more effective because the contaminated sediment can be fully captured by dredging as demonstrated by ROPS. Near shore areas that are dredged will be backfilled with clean material to grade to provide appropriate depth of sediment to allow for habitat re-establishment and species use.

10.7 Cost

Cost includes estimated capital and annual operation and maintenance costs, as well as present worth cost. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent. (This is a standard assumption in accordance with EPA guidance.)

The present-worth costs were calculated using a discount rate of seven percent and a thirty-year time interval for the post-construction monitoring and maintenance period.

The estimated capital, long term monitoring, operation and maintenance (O&M), and present-worth costs for each of the alternatives are presented in the table below. As can be seen from the Table 10-3, costs progressively increase from Alternative 1 through Alternative 10. Within the active Alternatives 3 through 10, the progressive cost increases are primarily driven by increasing amounts of dredging specified under the alternatives.

The cost of designing and implementing the habitat reconstruction measures is not included in the cost estimates for Alternatives 3 through 10. Because the scope of the habitat reconstruction work would be similar under Alternatives 3 through 10, however, the habitat reconstruction program does not change the relative cost effectiveness of each of those alternatives.

Table 10-3: Cost Comparison			
Alternatives	Capital (million)	Long term Monitoring/O&M (present worth, million)	Total Present Worth (million)
1. No Further Action	\$0	\$0	\$ 0
2. MNR	\$0	\$3.4	\$ 3.4
3. Capping	\$74.2	\$10.2	\$ 114.1
4. T1-T21 NS Dredge and Backfill, T21-T72 NS Capping, and T1-T72 MC Capping	\$97.6	\$10.6	\$ 147.2
5. T1-T72 NS Surface Sediment PCBs > 10 mg/kg Dredge and Cap between 1 mg/kg and 10 mg/kg, and T1-T72 MC Cap	\$117.3	\$11.0	\$ 175.2
6. T1-T72 NS Dredge and Backfill, T1-T72 MC Capping	\$165.2	\$11.8	\$ 243.1
7. T1-T72 NS Dredge and Backfill, T1-T19.5 Select MC Dredge and Cap Residuals, and Rest of MC Capping	\$242.7	\$11.8	\$ 351.6
8. T1-T21 NS Dredge and Backfill, T1-T21 MC Dredge and Cap Residuals, and T21-T72 NS and MC Capping	\$269.6	\$10.6	\$ 388.0
9. T1-T72 NS Dredge and Backfill, T1-T46 Select MC Dredge and Cap Residuals, and Rest of MC Capping	\$411.9	\$11.9	\$ 588.5
10. Dredging/Capping	\$901.2	\$11.9	\$ 1,273.5

Note: Dollars rounded.

Modifying Criteria - The final two evaluation criteria, 8 and 9, are called “modifying criteria” because new information or comments from the state or the community on the Proposed Plan may modify the preferred response measure or cause another response measure to be considered.

10.8 State/Support Agency Acceptance

State/Support Agency acceptance considers whether the State and/or Support Agency agrees with the EPA’s analyses and recommendations, as described in the RI/FS and Proposed Plan.

10.8.1 State Acceptance

The NYSDEC concurs with the selected remedy. A letter of concurrence is attached in Appendix I.

10.8.2 Tribal Acceptance

The SRMT, a support agency for the Site, was consulted on the selected remedy, which calls for dredging and backfilling to grade of the polychlorinated biphenyl (PCB)-contaminated near shore areas of the Grasse River, and the capping of PCB-contaminated sediment in the main channel of the river. The SRMT agrees with the near shore component of the selected remedy, but prefers the removal of PCB-contaminated sediments from the main channel of the river and therefore, does not agree with the selected remedy. SRMT’s comment letter to the proposed plan is attached in Appendix II.

10.9 Community Acceptance

Community Acceptance considers whether the local community agrees with EPA's analyses and preferred alternative. Comments received on the Proposed Plan are an important indicator of community acceptance.

Over 400 comment letters were received via fax, email, and U.S. mail during the comment period from September 28, 2012 through November 29, 2012. A total of over 200 people attended the two public meetings and the public information sessions on November 14 and 15, 2012 in Massena, NY and Akwesasne. While the majority of the public who commented at the public meeting on November 14, 2012, supported the preferred remedy, all of the public who commented at the November 15, 2012, public meeting opposed EPA's preferred remedy. The community members at the Akwesasne meeting requested either complete dredging of the PCB contamination from the Grasse River Superfund site and return of the Grasse River to its pristine state, or preferred Alternatives 8 or 9 which have dredging in the main channel in addition to dredging in the near shore.

EPA's responses to the significant public comments received in response to the Proposed Plan are contained in the attached Appendix II Responsiveness Summary.

11. PRINCIPAL THREAT WASTES

The NCP establishes an expectation that EPA will use treatment to address the principal threats posed by a site wherever practicable (NCP § 300.430(a)(1)(iii)(A)). In general, principal threat wastes are those source materials considered to be highly toxic or highly mobile which generally cannot be contained in a reliable manner or would present a significant risk to human health or the environment should exposure occur. The "principal threat" concept is applied to the characterization of "source materials" at a Superfund site. At the Site, the contaminated sediment from T1 to T21 and the contaminated surface sediment from T21 to T72 are considered to be a potential source of PCBs to surface water and fish and present a significant risk to human health and the environment should exposure occur. Although EPA believes that the contaminated sediments in the main channel can be reliably contained under an armored cap and main channel cap, EPA nevertheless characterized the most highly contaminated sediments as principal threat wastes at the Site. EPA does not believe that treatment of the principal threat wastes is practicable or cost effective given the widespread nature of the sediment contamination and the high volume of sediment that would need to be addressed.

12. SELECTED REMEDY

EPA's selected remedy is Alternative 6: T1-T72 Near Shore Dredge and Backfill to Grade and T1-T72 MC Capping (see Figure 6). This alternative includes the following components:

- Dredging of near shore sediment between river transects T1 and T21 with SLWA or maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg,

followed by backfill to grade;

- Dredging of near shore sediment between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg, followed by backfill to grade;
- Placement of an armored cap over the T1 and T21 main channel sediments where either the SLWA or the maximum surface sediment PCB concentrations is greater than or equal to 1 mg/kg. During design, the composition and thickness of the capping material will be optimized to promote reliability and efficacy of the cap;
- Placement of a main channel cap over sediments between T21 and T72 with maximum surface sediment PCB concentrations greater than or equal to 1 mg/kg. During design, the composition and thickness of the capping material will be optimized to promote reliability and efficacy of the cap;
- Within the near shore area targeted for dredging, the goal is to remove all of the PCB-contaminated sediments within these areas, leaving a residual of less than 1 mg/kg;
- Backfill, capping, and habitat replacement and reconstruction material will be clean material. Acceptance criteria for clean backfill quality are that no organic contaminants shall be detected using the following analytical methods, and concentration of inorganics shall be below Site-specific local background levels or will meet the LEL of NYSDEC's sediment criteria for inorganics. Analytical methods (or most current revision) to be used are: TCL VOCs EPA SW-846 Method 8260B; TCL SVOCs EPA SW-846 Method 8270C; Pesticide/PCBs EPA SW-846 Method 8082; Herbicides EPA SW-846 Method 8150; TAL Metals EPA SW-846 Method 6000/7000 Series; Cyanide EPA SW-846 Method 9012;
- Treatment of process water from the sediment dewatering facilities to meet NYSDEC discharge limits;
- A Phase 1A Cultural Resources Survey will be conducted during the pre-remedial design prior to any disturbance and/or in-river work;
- Additional sampling and analysis of the relatively small area of floodplains present along the river will be performed concurrent with the design phase of the project to determine if additional actions are warranted in any of the floodplain areas;
- Monitoring (during remedial construction and long-term) data will be collected and/or reviewed to demonstrate the effectiveness of the remedy in meeting the RAOs (see Section 9.2 Common Elements for more monitoring details). Monitoring will include the Massena Power Canal;
- Air monitoring to ensure that remedy implementation is protective;
- Institutional controls in the form of informational devices to limit exposure to PCBs. EPA is relying on existing NYSDOH fish consumption advisories. NYSDOH

periodically reviews fish PCB data to ensure the advisories are up to date and considers whether the fish consumption advisories need modification. Other informational devices would include outreach programs to inform the public to limit activities that could compromise the integrity of the cap (such as dredging) and to promote knowledge of and voluntary compliance with the fish consumption advisories; and,

- Development of a habitat reconstruction plan. The objective of the habitat reconstruction plan will be to identify impacts to habitat and species from the remedy, identify habitat re-establishment goals, provide design specifications for habitat recovery, and provide the scope for monitoring of habitat recovery. The plan will be developed and implemented during design and remedy implementation, will consider habitat and species management goals such as those stated in the NYS Comprehensive Wildlife Conservation Strategy, and will include the following components:
 - A) Habitat assessment study for affected species would be conducted to assess the river for habitats that are present and use of the habitats by aquatic and semi-aquatic species. The study would include a survey for the presence of federal and state listed aquatic species and the habitats used by these species in the remedial area. Additionally, the study will document the habitat characteristics (including but not limited to temperature regime, substrate type, structure, plant species and density) of all areas affected by the remedy and identify any fish and wildlife concentration areas. Collected data would be used to determine the habitats affected by the remedy, any actions necessary to eliminate or minimize impacts to listed species, measures needed to protect existing habitats, and develop design specifications for the replacement and recovery of the all affected habitats following the remedy.
 - B) Placement of clean substrate on top of the cap to allow for habitat re-establishment and species use, except where the material placed for the cap would be of sufficient quality and thickness to allow for omitting an additional habitat layer. The design of the thickness of the habitat layer of the cap will include consideration of the potential for burrowing animals to compromise the integrity of the cap. The habitat recovery material will be free of contaminants and would not require significant maintenance once habitat has been re-established. After placement of the habitat recovery material, main channel areas should be returned to a stable condition. The backfill material to return the near shore to initial grade should be of appropriate material conducive to habitat recovery. The most appropriate substrate type will be determined based on the information collected during the habitat assessment and may vary depending on habitat re-establishment and species requirements or habitat reconstruction goals.
 - C) Design for restoration of vegetation. In areas disturbed by the remedy or implementation of the remedy, vegetation will be re-established through a mixture of appropriate active planting and seeding and passive measures to allow for healthy and diverse habitat. Vegetation placement will be determined during the design; and,
 - D) Monitoring habitat and biota recovery. A monitoring plan will assess the success of habitat re-construction materials, plantings, and recovery of biota. The monitoring

plan will include baseline sampling and corrective actions pertaining to habitat reconstruction, should they be necessary. Additionally, monitoring of PCBs in biota will be conducted to track the success of the remedy in reducing PCB concentrations in aquatic and semi-aquatic species in the areas affected by the remedy. A protocol will be developed to monitor the ecosystem recovery through the measurement of appropriate physical, chemical and biological parameters. NYSDEC's Standard Operating Procedure: Biological Monitoring of Surface Waters in New York State (NYSDEC 2012) will be considered during the development of the protocol, as will EPA guidance. The standard operating procedures will include planning, collection, assessment and reporting requirements to monitor the impact of the remedial action and ecosystem recovery.

This alternative includes 59 acres of armored cap, approximately 225 acres of main channel cap, approximately 109,000 in-situ cy of sediment dredging in the near shore, and 41 acres backfilled to grade. Most of the dredged material (up to about 100,000 cy) would be disposed of in the on-site permitted Secured Landfill. During the design, the design team will evaluate the feasibility of expanding the on-site Secured Landfill to accommodate approximately 9,000 additional cy of dredged material. The design team also will consult with the appropriate state and federal permitting authorities regarding substantive requirements for such an expansion. In the event that it is not feasible to expand the existing on-site landfill, the additional 9,000 cy of dredged material will be disposed of at an off-site permitted TSCA/RCRA landfill.

Based on current information, the 59-acre main channel area estimated for armored capping is from T1 to T21. However, during the design further investigation may be necessary in the vicinity of T35, T37, T46, and any other areas where evidence of periodic high energy has been observed in the cores such that these areas may require more than a 12-inch sand/topsoil main channel cap. As with all areas of remediation, EPA will optimize the dredging and capping components during remedial design to maximize the immediate risk reduction and long-term effectiveness.

Based on the anticipated dredge material production rates, the current estimated construction period will extend over four construction seasons and include dredging, backfilling, and capping. It is anticipated that it will take two years for remedial design and mobilization, so that dredging may begin in 2015. Prior to construction, a remedial design would be developed that specifies details regarding the construction and implementation of the remedy. Design plans would include Site health and safety measures for the workers and a Community Health and Safety Plan for the surrounding community. In addition, habitat assessment would be conducted during the design. Habitat will be reconstructed during implementation of the remedy in accordance with the site-specific habitat reconstruction plan.

After construction is completed, this remedy relies on institutional controls, long-term monitoring, and sedimentation to support the remedy. Currently, an informational institutional control in the form of fish consumption advisory is administered by the NYSDOH for the lower Grasse River. EPA is relying on existing NYSDOH fish consumption advisories. NYSDOH periodically reviews fish PCB data to ensure the advisories are up to date and considers whether the fish consumption advisories need modification. Other informational devices would include outreach programs to inform the public to limit activities that could compromise the integrity of

the cap (such as dredging) and to promote knowledge and voluntary compliance with the fish consumption advisories.

If monitoring reveals any portion of the various caps has been eroded, damaged areas would require maintenance/replacement. If any portion of a capped area has been eroded, monitoring and sampling will determine whether other areas have been contaminated with PCBs released from the damaged areas. Additional enhanced capping may be undertaken to cover any areas in the main channel where sampling shows surface sediment PCB concentrations greater than or equal to 1 mg/kg. Monitoring will also be conducted to measure the success of habitat re-establishment. A review of site conditions would be conducted at least once every five years, as required by CERCLA.

The total estimated present-worth cost for the selected remedy is \$243,136,173. A breakdown of the costs is presented in Table 12-1 and is based on the best available information. This is an engineering cost estimate that is expected to be within +50 to -30 percent of the actual project cost (based on year 2012 dollars). Changes in the cost elements are likely to occur as a result of new information and data collected during the remedial design. Changes to the remedy may be documented in a memorandum in the administrative record, an Explanation of Significant Differences (ESD), or a ROD amendment.

12.1 Summary of the Rationale for the Selected Remedy

The selection of the remedy is accomplished through the evaluation of the nine criteria as specified in the NCP. The selected remedy is protective of human health and the environment. Risk is reduced through removal of PCB-contaminated sediment from the near shore area and by isolating PCBs in the main channel under caps. PCB-contaminated sediments in the scour-prone areas of the main channel will be isolated and stabilized by armored caps, which will protect those sediments from future ice jam events. The estimated modeled time periods to reach RGs are significantly shorter for the selected remedy compared to Alternatives 1 (No Further Action) and 2 (MNR). The estimated time frames also are significantly shorter than the projected times to reach the target concentrations under Alternatives 7 through 10, which include main channel dredging. The selected remedy is also protective of the environment, because it would reduce the PCB concentrations in fish and meet the RGs for ecological exposure within the 30-year modeled time frame.

The selected remedy is cost-effective for the risk reduction achieved. The selected remedy is more cost-effective than alternatives 7-10, which have higher present-worth costs, are projected to take longer to reach the interim target levels for PCBs in fish, and have greater short term impacts (e.g., more PCB resuspension). Alternatives 1 and 2, which are the least expensive alternatives, would not significantly improve the unacceptable human health and ecological risks at the Site. Although Alternatives 3-5 are less costly than the selected remedy, each of those alternatives includes near shore capping that would alter the near shore bathymetry.

The MNR Alternative 2 relies more heavily on fish consumption advisories than the active remedial alternatives because of the significantly longer times needed to meet fish tissue target concentrations under MNR. Institutional controls do not protect ecological receptors, and human health risk reduction relies on knowledge of and voluntary compliance with the

consumption and other advisories. Consequently, the active remedial alternatives are substantially more protective of people who do not follow the fish consumption and other advisories, because of the residual risk in consuming fish and the shorter time required to reach fish PCB target levels under those alternatives.

The selected remedy is also protective of the environment, because the selected remedy will reduce the average PCB concentrations in fish across the Site to levels that are within the range of 0.22 to 0.44 mg/kg in whole-body fish (brown bullhead and spottail shiner) based on the NOAEL and LOAEL for consumption of fish by the mink. The selected remedy is therefore protective of the piscivorous mammal calculated to be at greatest risk from PCBs at the Site. By removing PCBs exposures from the lower Grasse River, the selected remedy also is protective of other ecological receptors including fish, such as the brown bullhead and piscivorous birds, such as the belted kingfisher, which also are at risk at the Site. Overall reductions in ecological risk achieved by the selected remedy are expected to be large, especially in comparison with the No Action and MNR alternatives.

The selected remedy maximizes the benefit gained from successful dredging in the near shore where minimal or no residual PCBs are anticipated, such that near shore capping after dredging will not be needed. The area where the near shore is dredged will be backfilled to grade and habitat reconstruction will re-establish healthy habitat for biota.

The selected remedy will comply with all of the listed ARARs in Tables 13-1 through 13-3 except two chemical-specific ARARs which are not expected to be met due to Site background PCB loading conditions. Therefore, because of technical impracticability, those two ARARs are being waived. Even the most aggressive dredging and no dredging alternatives would require these same waivers. The preferred alternative is technically and administratively feasible and implementable. All of the necessary personnel, equipment, and services required are expected to be readily available.

Implementation of the selected remedy will provide stability to the contaminated sediment that has the greatest potential for mobility due to severe ice jam events, reduce additional mass of PCBs in the sediments (complementing mass removed during the NTCRA and ROPS), and lower the average PCB concentration in surface sediments almost bank to bank throughout the entire 7.2 mile stretch of the lower Grasse River, which in turn will reduce PCB levels in the water column and fish and other biota, thereby reducing the level of risk to human and ecological receptors. Reduced amounts of PCBs in the water column and reduced surface sediment concentrations will also reduce the long-term transport of PCBs from the Site to the St. Lawrence River. Approximately by 2018, the selected remedy is anticipated to reduce average PCB loading to the St. Lawrence River by about 85%.

EPA has identified Akwesasne as a Community with Environmental Justice Concerns, and the selected remedy includes a remedial goal that is specifically designed to protect the Mohawk community (see Sections 8 and 12). EPA investigations revealed that culturally the Akwesasne is a subsistence fishing/high fish consumption community and thus a fish ingestion rate of 142 grams/day was used in the risk assessment for the SRMT members (Forti et al, 1995), whereas the fish ingestion rate used for the non-SRMT adults was 31.9 grams/day. The remedial goals for the SRMT and the non-SRMT adults were based on their individual ingestion rates i.e., 142

grams/day and 31.9 grams/day, respectively. EPA utilized the fish ingestion rate that is specific to the Mohawk population in developing the remedial goal of 0.01 mg/kg PCBs in fish. This remedial goal is designed to be protective of the Mohawk community that consumes fish from the Grasse River, and EPA will not deem the Site remedy to be complete until this goal is achieved (see Section 8). In addition, following the 2003 ice jam event, and in consultation with the State of New York and the SRMT, the EPA re-evaluated two aspects of the 2003 Proposed Plan (which the EPA had at that time proposed but did not proceed with). First, the EPA lowered the action level that would trigger dredging from 25 mg/kg in surface sediments to 1 mg/kg in near shore sediments, and lowered the action level that would trigger capping from 5 mg/kg to 1 mg/kg in main channel surface sediments. The EPA also revised the 2003 proposed plan's definition of surface sediments from the top 3 inches to the top 6 inches in the main channel, and the top 12 inches in the near shore, which increased the areas and sediment volumes subject to cleanup.

13. STATUTORY DETERMINATIONS

EPA and the State of New York believe that the selected remedy complies with the CERCLA and NCP provisions for remedy selection, meets the threshold criteria, and provides the best balance of tradeoffs among the alternatives with respect to the balancing and modifying criteria. These provisions require the selection of remedies that are protective of human health and the environment, comply with ARARs (or justify a waiver from such requirements), are cost effective, and utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In addition, CERCLA includes a preference for remedies that employ treatment that permanently and significantly reduce the volume, toxicity or mobility of hazardous substances as a principal element (or justify not satisfying the preference). For the Grasse River Site, EPA does not believe that treatment of the sediments is practicable or cost effective given the widespread nature of the sediment contamination and the high volume of sediment that would need to be addressed. The following sections discuss how the selected remedy meets these statutory requirements.

13.1 Protection of Human Health and the Environment

The selected remedy, Alternative 6, is protective of human health and the environment. Risk is reduced through removal of PCB-contaminated sediment from the near shore area, and by isolating PCBs in the main channel under caps. PCB-contaminated sediments in the scour-prone areas of the main channel will be isolated and stabilized by the armored cap, which will protect those sediments from future ice jam events. The modeling projects that the target concentration of 0.36 mg/kg in fish, which is protective of the average adult who consumes one fish meal every two months, would be attained in seven years from the start of the active remediation. The modeling also projects that the target concentration of 0.26 mg/kg in fish, which is protective of the average adult who consumes one fish meal per month, would be attained eight years after the start of active remediation. These time periods are significantly shorter compared to Alternatives 1 (No Further Action) and 2 (MNR), under which attainment of the targets are greater than the 30-year modeling time frame. The time frames also are significantly shorter than the projected times to reach the target concentrations under Alternatives 7-10, which include main channel dredging. The protectiveness of the selected remedy is further enhanced through the

implementation of institutional controls, such as the fish consumption advisories and other informational devices that would include outreach programs to inform the public to limit activities that could compromise the integrity of the cap (such as dredging) and to promote knowledge and voluntary compliance with the fish consumption advisories.

According to the model projections, none of the alternatives will meet the human health RG of 0.05 mg/kg PCBs in fish within the 30-year modeling time frame. Also, although it was not modeled, none of the alternatives, including the selected remedy, are anticipated to meet the lower Mohawk human health RG of 0.01 mg/kg PCBs in fish within the 30-year modeling time frame for the same reasons why the 0.05 mg/kg RG would not be met.

The selected remedy is also protective of the environment, because it would reduce the PCB concentrations in fish to concentrations that are within the range of 0.22 to 0.44 mg/kg (wet weight) in whole-body fish and a range from 0.1 to 0.2 mg/kg (wet weight) PCBs in brown bullhead fillet within the 30-year modeled time frame, which are the RGs for ecological exposure. By removing the PCBs from the Grasse River and by providing chemical separation through capping, the remedy also is protective of piscivorous birds (belted kingfisher), mammals (mink), and insectivorous mammals (little brown bat) that consume fish and aquatic invertebrates.

13.2 Compliance with ARARs

The selected remedy will comply with the location-specific and action-specific ARARs identified, as well as the two out of four chemical-specific ARARs. Because of technical impracticability, two chemical-specific ARARs pertaining to water column concentrations (0.001 ng/L NYS water quality PCB standards for the protection of human consumers of fish and 0.12 ng/L for the protection of wildlife) are hereby waived (see CERCLA Section 121(d)(4)(c) and 40 C.F.R. 300.430(f)(1)(ii)(C)(3)). Even the most aggressive remedy, Alternative 10, would require these same waivers.

EPA and the SRMT have extensively discussed, on a government-to-government basis, whether to apply the SRMT's sediment cleanup standard for PCBs (0.1 mg/kg) as "relevant and appropriate" or "to be considered" for the cleanup. As noted above, the United States maintains that land reserved to the SRMT by the 1796 Treaty includes the Indian Meadows along the banks of the lower Grasse River, and EPA, of course, subscribes to the United States' position regarding the Indian Meadows. The status of the lands reserved by the 1796 Treaty is currently in dispute. See *Canadian St. Regis Band of Mohawk Indians v. State of New York, et al.*, 5:82-cv-783 (N.D.N.Y.).

EPA evaluated the SRMT sediment standard as a "to-be-considered" requirement for the Grasse River cleanup. EPA's decision to evaluate the SRMT standard as a TBC was solely for purposes of developing the remedy, and was unrelated to the status of the SRMT's land claim. The SRMT sediment standard was considered when EPA established a remediation goal for PCBs in fish that is protective of Mohawk health, although it is not being adopted as the cleanup standard for the sediment. EPA notes that the SRMT cleanup standard is significantly lower than EPA's action levels for sediment cleanup (i.e., >1 mg/kg PCB surface or SLWA concentration) in this Record of Decision. Alcoa's analysis conducted at the request of EPA

concluded that it is technically impracticable to achieve the SRMT's sediment cleanup level of 0.1 mg/kg, even with a combination of capping and dredging. The ARARs, TBCs, and other guidelines for the selected remedy are provided in Tables 13-1 through 13-3.

13.3 Cost Effectiveness

The selected remedy is cost-effective. The selected remedy's overall effectiveness is determined based on a consideration of its long-term effectiveness and permanence (Section 10.3, above), reduction in toxicity, mobility or volume through treatment (Section 10.4, above); and short-term effectiveness (Section 10.5, above). No Action and MNR would result in a continuation of unacceptably elevated concentrations of PCBs in fish at the Site, and the continued degradation of the sediments and surface water quality of the Grasse River, especially in the upper two miles of the Site where severe ice jam events can potentially scour the sediment and transport highly contaminated sediment downstream with a frequency as high as once every eight-to-ten years. While Alternatives 3, 4, and 5 are less expensive than the selected remedy, each of those alternatives will likely cause changes in the near shore bathymetry. The selected remedy is more cost-effective than Alternatives 7 through 10. The selected remedy is significantly less expensive than alternatives 7 through 10, which include dredging and are projected to take longer to reach the interim target levels for PCBs in fish.

13.4 Utilization of Permanent Solutions and Alternative Treatment (or Resource Recovery) Technologies to Maximum Extent Practicable

EPA has determined that the selected remedy represents the maximum extent to which permanent solutions and treatment technologies can be utilized in a practicable manner at the Site. Of those alternatives that are protective of human health and the environment and comply with ARARs (or provide a basis for invoking an ARAR waiver), EPA has determined that the selected remedy provides the best balance of trade-offs in terms of the five balancing criteria, while also considering the statutory preference for treatment as a principal element and the bias against off-site disposal without treatment, and after considering State/support agency and community acceptance. Implementation of the selected remedy will additionally reduce the mass of PCBs in the sediments and lower the average PCB concentration in surface sediments, which in turn will reduce PCB levels in the water column and fish and other biota, thereby reducing the level of risk to humans and ecological receptors.

13.5 Preference for Treatment as a Principal Element

The selected remedy results in the removal of approximately 109,000 cy of PCB-contaminated sediments from the Site. This results in a long-term reduction in the mobility and volume of PCBs in the near shore of the river, even though treatment is not a principal element of the remedy. As explained above (Section 10.4), EPA has determined that given the volume of material to be removed, treatment of the material prior to on-Site disposal (other than the stabilization of the sediments for handling purposes) would not be cost-effective. During remedial design, EPA will consider whether there are any new treatment options for the dredged sediment and whether there are value engineering recommendations (*e.g.*, waste volume or toxicity reductions) that could improve the cost-effectiveness of the remedy. During the remedial design or implementation, EPA will determine whether beneficial use (*i.e.*, the

manufacture of commercial products) is appropriate for some portion of the dredged material.

13.6 Five-Year Review Requirements

Because the selected remedy will result in hazardous substances, pollutants, or contaminants remaining on-Site above levels that allow for unlimited use and unrestricted exposure, a statutory review will be conducted within five years after initiation of the remedial action. The five-year review will evaluate the results from monitoring programs established as part of this remedy to ensure that the remedy remains protective of human health and the environment, including whether the anticipated trajectory of decreasing PCB concentrations in fish tissue is occurring. The five-year review will also consider whether institutional controls are in place and effective. If warranted, the five-year review will identify additional measures or corrective actions to be implemented to ensure the protectiveness of the remedy.

If at any time EPA determines that the remedial action is no longer protective of human health or the environment, EPA may select further response actions for the Site in accordance with the requirements of CERCLA and the NCP. In addition, if any activities being conducted at the Site, or changes in conditions at the Site, pose a threat to public health or welfare or the environment, EPA may take or require other actions reasonably necessary to abate the threat, in accordance with the requirements of CERCLA and the NCP.

14. DOCUMENTATION OF SIGNIFICANT CHANGES

The Proposed Plan for the Grasse River Site was released in September 2012. The Proposed Plan identified Alternative 6 as the preferred alternative for remediating the contaminated sediments. Alternative 6 includes of near shore dredging with PCB concentrations equal to or greater than 1 mg/kg and backfill to grade in T1-T72, main channel armored capping of sediment where either the SLWA or the maximum surface sediment PCB concentration is greater than or equal to 1 mg/kg in T1-T21, and main channel capping of surface sediment where the maximum surface sediment PCB concentration is greater than or equal to 1 mg/kg in T21-T72. EPA reviewed all written (including electronic formats such as e-mail) and oral comments during the public comment period. EPA has determined that no significant changes to the remedy, as originally identified in the Proposed Plan, are necessary or appropriate.

PART 3 RESPONSIVENESS SUMMARY

The Responsiveness Summary is provided as a separate attachment to this Record of Decision.

FIGURES

Grasse River ROD Figure 1.pdf

Grasse River ROD Figure 2.pdf

Grasse River ROD Figure 3.pdf

Grasse River ROD Figure 4.pdf

Grasse River ROD Figure 5.pdf

Grasse River ROD Figure 6.pdf

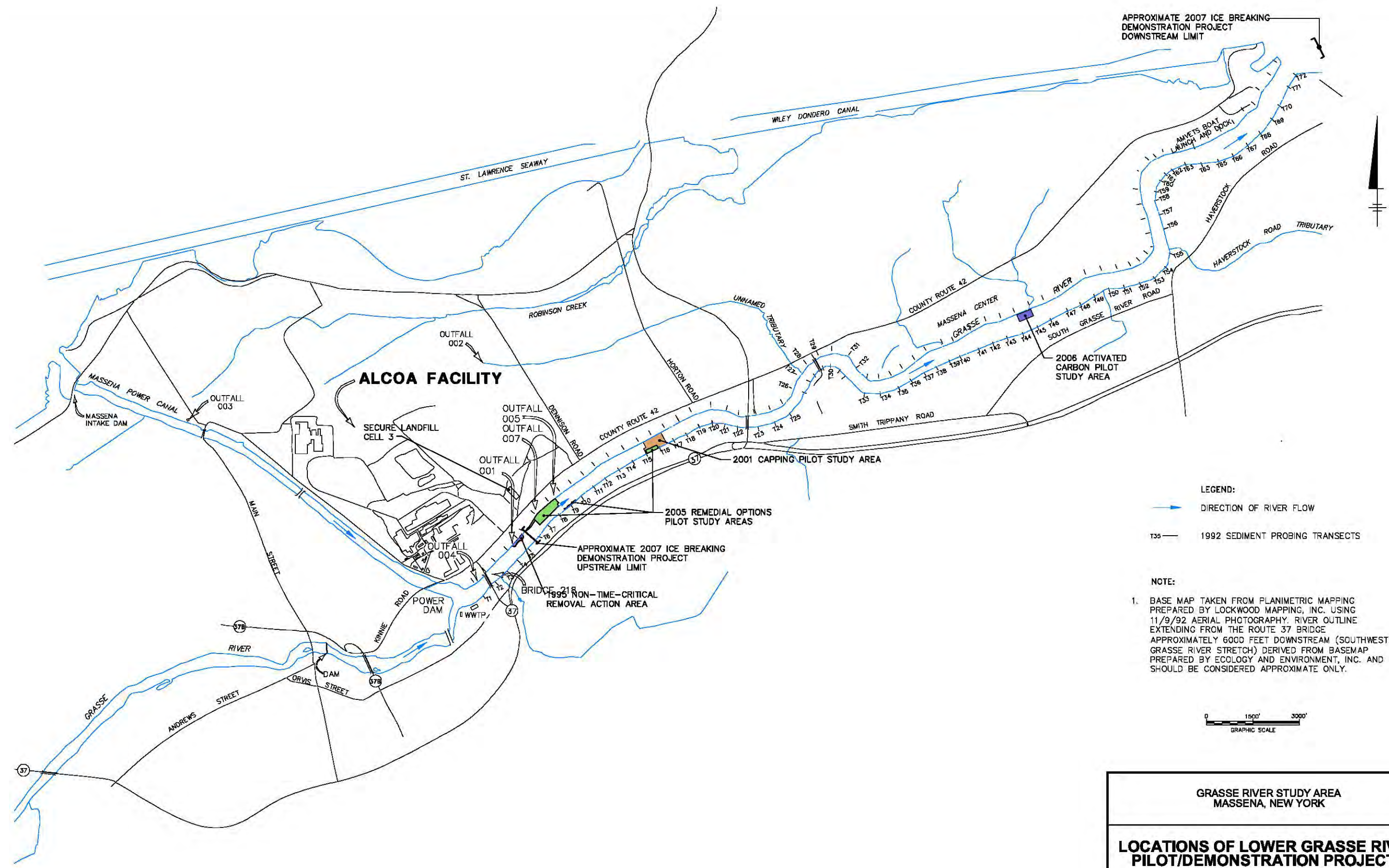
Figure 5-1 food chain diagram from 1993 RA.pdf

FIGURE 1 GRASSE RIVER SITE LOCATION MAP



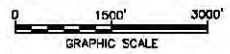
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IMAGES:
 XREFS:
 106753001
 106753000



LEGEND:
 —> DIRECTION OF RIVER FLOW
 T35 — 1992 SEDIMENT PROBING TRANSECTS

NOTE:
 1. BASE MAP TAKEN FROM PLANIMETRIC MAPPING PREPARED BY LOCKWOOD MAPPING, INC. USING 11/9/92 AERIAL PHOTOGRAPHY. RIVER OUTLINE EXTENDING FROM THE ROUTE 37 BRIDGE APPROXIMATELY 6000 FEET DOWNSTREAM (SOUTHWEST GRASSE RIVER STRETCH) DERIVED FROM BASEMAP PREPARED BY ECOLOGY AND ENVIRONMENT, INC. AND SHOULD BE CONSIDERED APPROXIMATE ONLY.



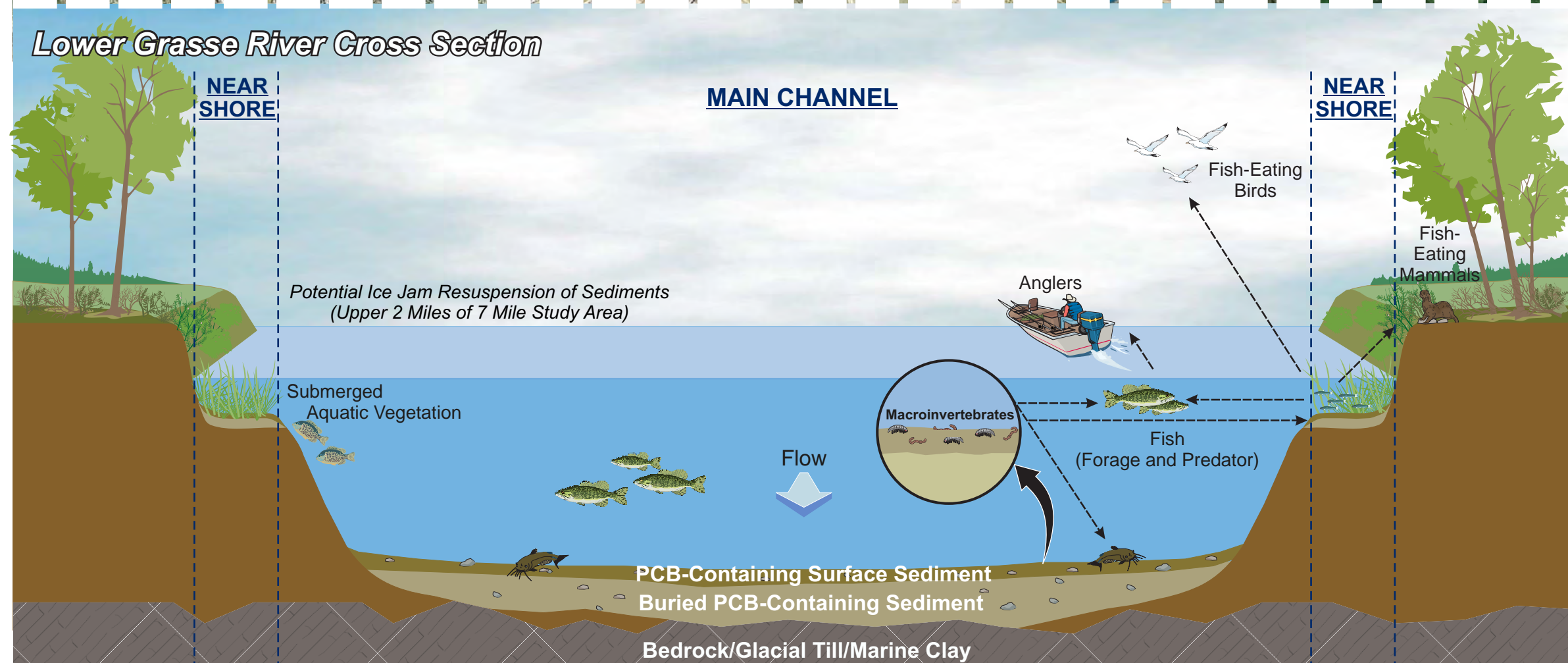
**GRASSE RIVER STUDY AREA
 MASSENA, NEW YORK**

**LOCATIONS OF LOWER GRASSE RIVER
 PILOT/DEMONSTRATION PROJECTS**

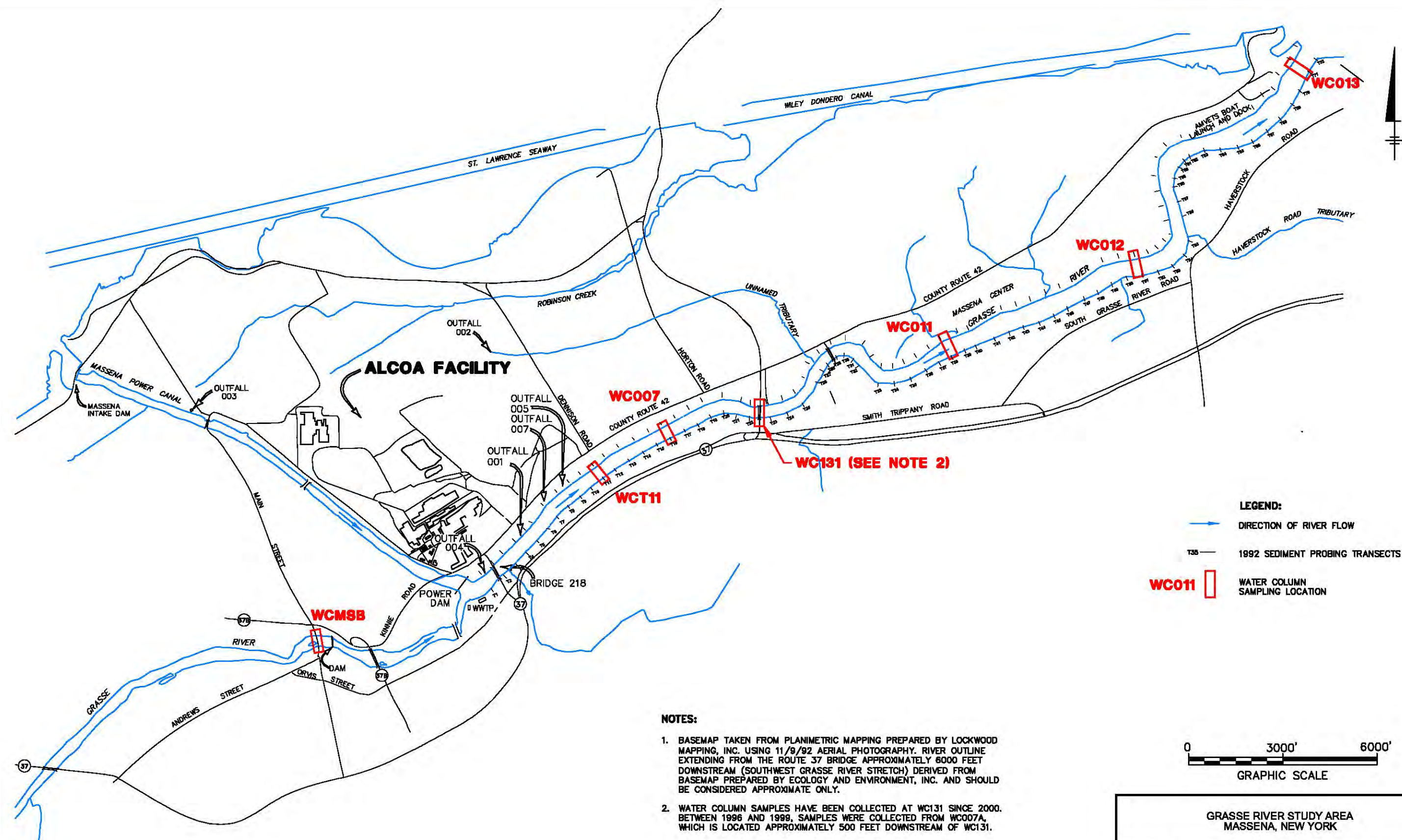
FIGURE IS FROM THE
 ANALYSIS OF ALTERNATIVES REPORT,
 COURTESY OF ALCOA

**FIGURE
 2**

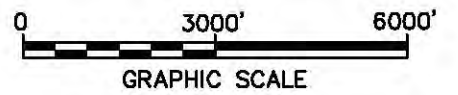
Figure 3 Conceptual Site Model Grasse River Site



CITY: SYRACUSE DIV: GROUP: ENVCAD DB: G. STOWELL, N. SAWYER, L. FORAKER LD: PIC: H. VANDEWALKER PM: H. VANDEWALKER TR: S. HILL LVR: ON* OFF: REF
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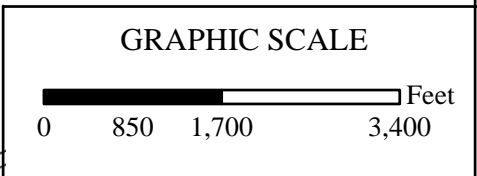
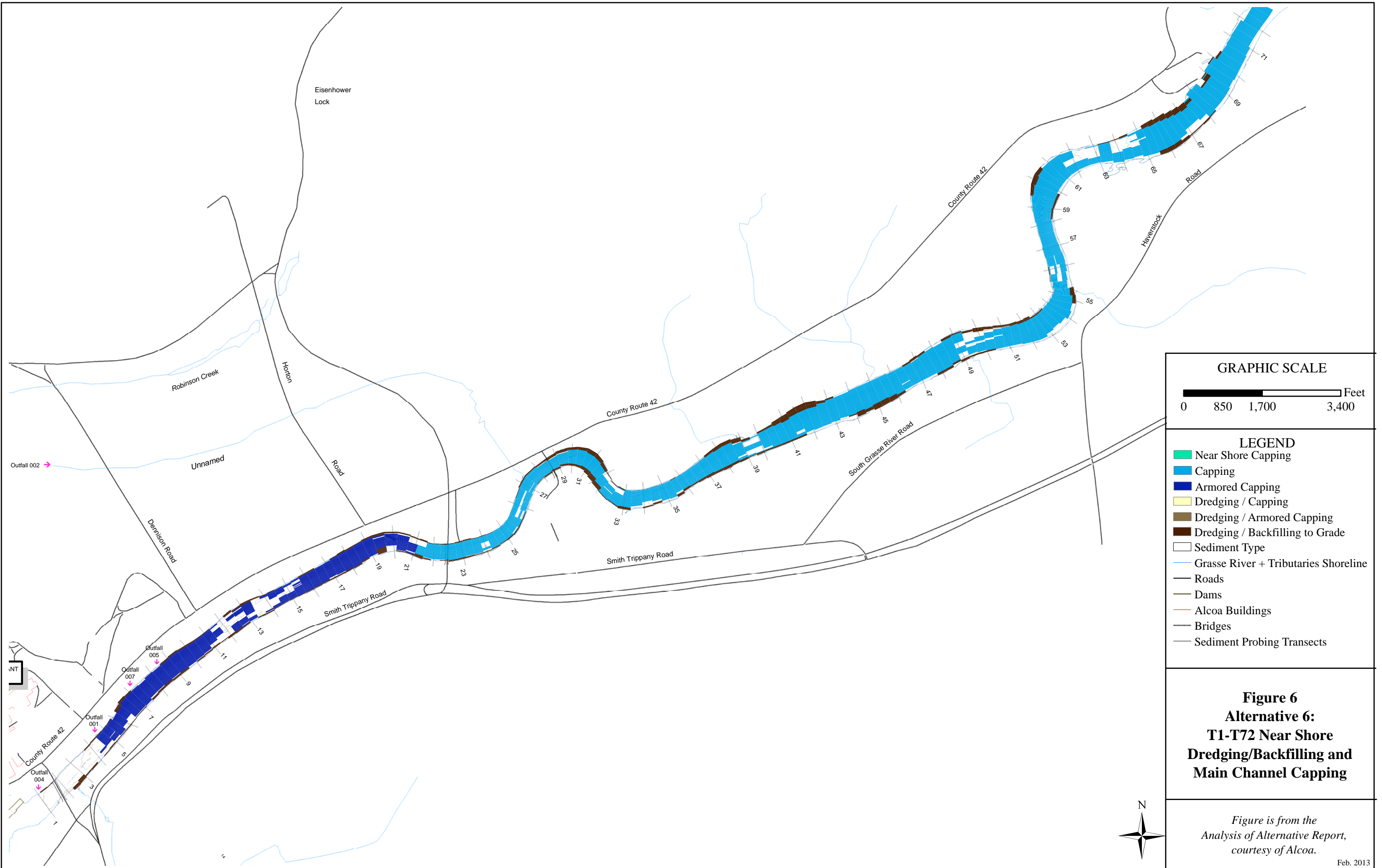


LEGEND:
 ———> DIRECTION OF RIVER FLOW
 T35 — 1992 SEDIMENT PROBING TRANSECTS
 WC011 [] WATER COLUMN SAMPLING LOCATION



- NOTES:**
1. BASEMAP TAKEN FROM PLANIMETRIC MAPPING PREPARED BY LOCKWOOD MAPPING, INC. USING 11/9/92 AERIAL PHOTOGRAPHY. RIVER OUTLINE EXTENDING FROM THE ROUTE 37 BRIDGE APPROXIMATELY 6000 FEET DOWNSTREAM (SOUTHWEST GRASSE RIVER STRETCH) DERIVED FROM BASEMAP PREPARED BY ECOLOGY AND ENVIRONMENT, INC. AND SHOULD BE CONSIDERED APPROXIMATE ONLY.
 2. WATER COLUMN SAMPLES HAVE BEEN COLLECTED AT WC131 SINCE 2000. BETWEEN 1996 AND 1999, SAMPLES WERE COLLECTED FROM WC007A, WHICH IS LOCATED APPROXIMATELY 500 FEET DOWNSTREAM OF WC131.

GRASSE RIVER STUDY AREA MASSENA, NEW YORK	
WATER COLUMN MONITORING LOCATIONS	
FIGURE IS FROM THE ANALYSIS OF ALTERNATIVES REPORT, COURTESY OF ALCOA	FIGURE 4



LEGEND

- Near Shore Capping
- Capping
- Armored Capping
- Dredging / Capping
- Dredging / Armored Capping
- Dredging / Backfilling to Grade
- Sediment Type
- Grasse River + Tributaries Shoreline
- Roads
- Dams
- Alcoa Buildings
- Bridges
- Sediment Probing Transects

Figure 6
Alternative 6:
T1-T72 Near Shore
Dredging/Backfilling and
Main Channel Capping

Figure is from the
Analysis of Alternative Report,
courtesy of Alcoa.

Feb. 2013

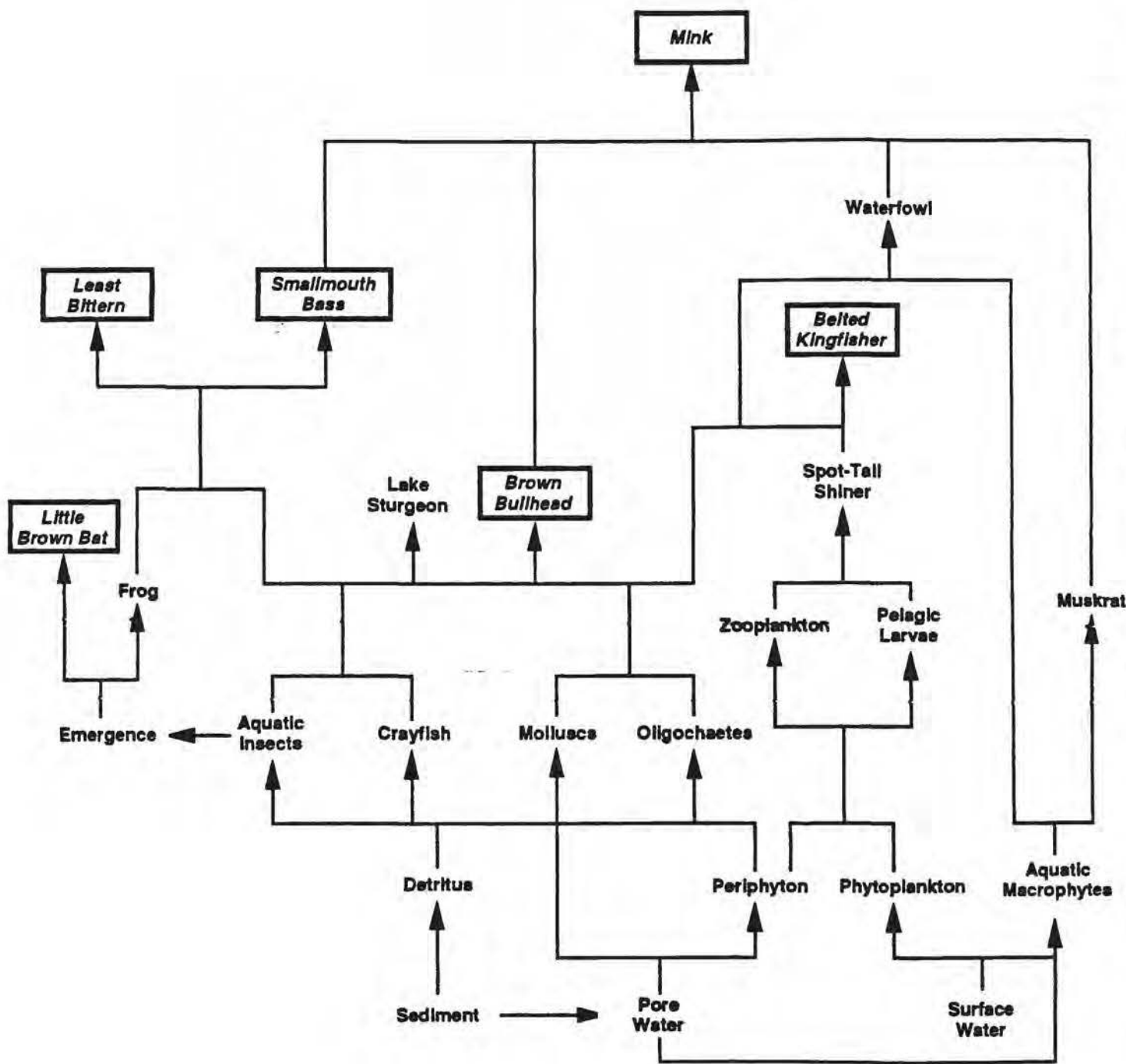


Figure 5-1. Simplified Food Chain with Representative Organisms Likely to Inhibit the Alcoa Study Area.

TABLES

Tables 7-1 through 7-9 Human Health Risk Assessment Tables

Table 10-1 Approximate Time to Reach Target Concentration in Fish

Table 10-2 Volume of Dredging and Area Capped

Table 10-3 Cost Comparison

Table 12-1 Cost Estimate Summary for the Selected Remedy

Table 13-1 Chemical-Specific ARARs, TBCs, and Other Guidelines

Table 13-2 Location-Specific ARARs, TBCs, and Other Guidelines

Table 13-3 Action-Specific ARARs, TBCs, and Other Guidelines

Table 7-1: Summary Exposure Point Concentrations (EPCs) for Chemicals of Concern - Fish
Grasse River Superfund Site

Scenario Timeframe: Medium: Exposure Medium:		Current/Future Fish Fish		Concentrations Detected		Units ¹	Frequency of Detection	Exposure Point Concentration - RME and CTE		
Exposure Point	Chemicals of Concern	Minimum	Maximum	Value	Units			Statistic ²	Rationale	
Reaches 1 - 2	PCBs	0.06	1.45	mg/kg wet weight	8/39	0.075	mg/kg wet weight	95% UCL-T	EPCs calculated using USEPA 1992 guidance	
Reaches 4 - 8	PCBs	0.24	29.7	mg/kg wet weight	420/422	7.25	mg/kg wet weight	95% UCL-T	EPCs calculated using USEPA 1992 guidance	
Reaches 7 - 8 (SRMT Exposures)	PCBs	0.69	26.7	mg/kg wet weight	139/139	6.31	mg/kg wet weight	95% UCL-T	EPCs calculated using USEPA 1992 guidance	
Reaches 4 to 8	Dioxin (Total TEQ)	(3)	(3)	mg/kg wet weight	(3)	5.23 x 10 ⁻⁰⁶	mg/kg wet weight	95% UCL	ProUCL	

(1) Units of detection were mg/kg wet weight in fish.

(2) The statistical analysis for PCBs were based on USEPA 1992 Supplemental Guidance to RAGS. Calculating the Concentration Term OSWER 9285.7-081. The statistical methods used for calculating the EPC for the dioxin contaminants were based on recommendations from ProUCL version 4.1 available at: <http://www.epa.gov/esd/tsc/software.htm>. The calculations were obtained from RAGS Part D Table 3.1 and ProUCL Statistical Outputs provided in the Baseline Human Health Risk Assessment.

(3) The minimum, maximum, and frequency of detection depend on the individual congener concentrations. Calculating the EPC for polychlorinated dibenzodioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) were based on congener data from 14 fish from Reaches 4 to 8. The congener data for the 14 fish were converted to dioxin equivalent concentrations using the 2005 World Health Organization's TEFs (Van den Berg et al., 2006, USEPA 2010), resulting in a "dioxin-equivalent" concentration for each fish (i.e., fish tissue in TCDD equivalents).

Table 7-2: Summary Exposure Point Concentrations (EPCs) for Chemicals of Concern - Sediment
Grasse River Superfund Site

Scenario Timeframe: Medium: Exposure Medium:	Current/Future Sediment Sediment								
Exposure Point	Chemicals of Concern	Concentrations Detected		Units ¹	Frequency of Detection	Exposure Point Concentration - RME and CTE			
		Minimum	Maximum			Value	Units	Statistic ²	Rationale
Reaches 7 - 8 (SRMT Exposures)	PCBs	0.24	132	mg/kg	78/83	34.3	mg/kg	95% UCL-T	EPCs calculated using USEPA 1992 guidance.
Reaches 4 - 8	PCBs	0.11	3480	mg/kg	415/429	51.41	mg/kg	95% UCL-T	EPCs calculated using USEPA 1992 guidance

Table 7-3: Summary Exposure Point Concentrations (EPCs) for Chemicals of Concern - Surface Water
Grasse River Superfund Site

Scenario Timeframe: Medium: Exposure Medium:	Current/Future Surface Water Surface Water								
Exposure Point	Chemicals of Concern	Concentrations Detected		Units ¹	Frequency of Detection	Exposure Point Concentration - RME and CTE			
		Minimum	Maximum			Value	Units	Statistic ²	Rationale
Reaches 4 - 8	PCBs	0.00048	0.237	ug/l	309/325	0.19	ug/l	95% UCL-T	EPCs calculated using USEPA 1992 guidance

(1) Units of detection were ug/l in surface water.

(2) The statistical analysis for PCBs were based on USEPA 1992. Supplemental Guidance to RAGS. Calculating the Concentration Term OSWER 9285.7-081.

Table 7-4: Conceptual Site Model
Grasse River Superfund Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	On-Site / Off-Site	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current / Future	Fish	Fish	Grasse River Fish	SRMT Angler	Adult *	Ingestion	On-Site	Quantitative	PCBs have been widely detected in fish from all Reaches of the Grasse River. Consumption of fish from the Grasse River has been identified as a completed exposure pathway in local creel surveys.
				Local Angler	Adult *	Ingestion	On-Site	Quantitative	PCBs have been widely detected in fish from all Reaches of the Grasse River. Consumption of fish from the Grasse River has been identified as a completed exposure pathway in local creel surveys.
	Sediment	Sediment	Grasse River Sediment	SRMT Angler	Adult	ingestion	On-Site	Quantitative	PCBs have been detected in sediment from Reaches 7 and 8 of the Grasse River where SRMT members may be exposed. SRMT anglers may be exposed during gill netting activities.
						Dermal			
	Sediment	Sediment	Grasse River Sediment	Recreational User	Adult	ingestion	On-Site	Quantitative	PCBs have been detected in sediment from all Reaches of the Grasse River. Recreational use of the Grasse River may result in exposure to sediments.
					Adolescent	ingestion			
						Dermal			
	Young Child	ingestion	On-Site	Quantitative					
		Dermal							
	Surface Water	Surface Water	Grasse River Surface Water	Recreational User	Adult	ingestion	On-Site	Quantitative	PCBs have been detected in surface water from all Reaches of the Grasse River. Recreational use of the Grasse River may result in exposure to surface water.
Adolescent					ingestion				
					Dermal				
Young Child	ingestion	On-Site	Quantitative						
	Dermal								

* The cancer risks to the young child and adolescent are lower than those of the adult based on differences in ingestion rate, bodyweight and exposure duration. The non-cancer health hazards for a young child (1 to 6 years of age) would be approximately 1.6 times higher than that of an adult assuming an ingestion rate of 1/3 of that of the adults for all stretches of the River. The non-cancer hazards for the adolescent (7 to 18 years) would be approximately 1.2 to 1.2 times higher than the adult Hazard Index assuming an ingestion rate of 2/3 that of the adult for all stretches of the River. The non-cancer hazards in all reaches of the adolescent and young child are above the goal of protection.

Table 7-5: Non-Cancer Toxicity Data Summary
Grasse River Superfund Site

Chemicals of Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal		Absorbed RfD for Dermal		Primary Target Organ	Combined Uncertainty/ Modifying Factors	RfD Target (organs)	
		Value	Units	Value	Reference	Value	Units			Sources	Date (MM/DD/YYYY)
Pathway: Ingestion, Dermal											
Aroclor 1016	Chronic	7×10^{-5}	mg/kg-day	NA	NA	NA	NA	reduced birth weight	100	IRIS	6/21/2001
Aroclor 1254	Chronic	2×10^{-5}	mg/kg-day	NA	NA	NA	NA	decreased immune response	300	IRIS	6/21/2001
2,3,7,8-TCDD	Chronic	7×10^{-10}	mg/kg-day	NA	NA	NA	NA	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	30	IRIS	2/17/2012

Table 7-6: Cancer Toxicity Data Summary
Grasse River Superfund Site

Chemicals of Concern	Oral Cancer Slope Factor		Dermal Cancer Slope Factor		Weight of Evidence/ Cancer Guidelines Description ¹	Sources	Date (MM/DD/YYYY)
	Value	Units	Value	Units			
Pathway: Ingestion, Dermal							
PCBs (fish and sediment)	2	(mg/kg-day) ⁻¹	2	(mg/kg-day) ⁻¹	B2 (Probable)	IRIS ²	6/21/2001
PCBs (water)	0.4	(mg/kg-day) ⁻¹	0.4	(mg/kg-day) ⁻¹	B2 (Probable)	IRIS	6/21/2001
2,3,7,8-TCDD	1.56×10^5	(mg/kg-day) ⁻¹	1.56×10^5	(mg/kg-day) ⁻¹	B2 (Probable)	HAD ³	2/17/2012 ³

(1) The B2 designation specifies a probable human carcinogen indicating there is sufficient evidence in animals and either inadequate but suggestive evidence in humans.

(2) IRIS is the Integrated Risk Information System available at www.epa.gov/iris.

(3) [U.S. EPA. Health Assessment Document for Polychlorinated Dibenzo-P-Dioxins \(1985\). U.S. Environmental Protection Agency, Washington, D.C., EPA/600/8-84/014F \(NTIS PB86122546\), 1985.](http://www.epa.gov/iris)

mg/kg-day is milligrams/kilogram bodyweight/day.

Table 7-7: Risk Characterization Summary for RME - Carcinogens
Grasse River Superfund Site

Scenario Timeframe:		Future					
Receptor Population:		Local Angler					
Receptor Age:		Adult					
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk			Exposure Routes Total
				Ingestion	Inhalation	Dermal	
Fish (Reaches 1 - 2)	Fish	Fish	PCBs	3×10^{-5}	--	--	3×10^{-5}
			Chemical Total	3×10^{-5}	--	--	3×10^{-5}
			Fish Ingestion Risk (Total)				3×10^{-5}
Total Risk							3×10^{-5}
Fish (Reaches 4 - 8)	Fish	Fish	PCBs	3×10^{-3}	--	--	3×10^{-3}
			Dioxin TEQ	1×10^{-4}	--	--	1×10^{-4}
			Chemical Total	3×10^{-3}	--	--	3×10^{-3}
			Fish Ingestion Risk (Total)				3×10^{-3}
Total Risk							3×10^{-3}

Scenario Timeframe:		Future					
Receptor Population:		SRMT Angler					
Receptor Age:		Adult					
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk			Exposure Routes Total
				Ingestion	Inhalation	Dermal	
Fish (Reaches 7 - 8)	Fish	Fish	PCBs	2×10^{-2}	--	--	2×10^{-2}
Sediment (Reaches 7 - 8)	Sediment	Sediment	PCBs	--	--	3×10^{-5}	3×10^{-5}
			Chemical Total	2×10^{-2}	--	--	2×10^{-2}
			Fish Ingestion Risk (Total)				2×10^{-2}
Total Risk							2×10^{-2}

Scenario Timeframe:		Future					
Receptor Population:		Recreational User					
Receptor Age:		Child (1 to 6 years)					
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk			Exposure Routes Total
				Ingestion	Inhalation	Dermal	
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	2×10^{-6}	--	2×10^{-6}	4×10^{-6}
			Dioxin TEQ	1×10^{-6}	--	2×10^{-7}	2×10^{-6}
			Chemical Total	3×10^{-6}	--	2×10^{-6}	6×10^{-6}
			Sediment Risk (Total)				6×10^{-6}
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	2×10^{-9}	--	1×10^{-7}	1×10^{-7}
			Dioxin TEQ	8×10^{-9}	--	2×10^{-9}	1×10^{-8}
			Chemical Total	1×10^{-8}	--	1×10^{-7}	1×10^{-7}
			Surface Water Risk (Total)				1×10^{-7}
Total Risk							6×10^{-6}

Table 7-7: Risk Characterization Summary for RME - Carcinogens
Grasse River Superfund Site

Scenario Timeframe: Future		Receptor Population: Recreational User					
Receptor Age: Youth (7 to 18 years)							
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk			Exposure Routes Total
				Ingestion	Inhalation	Dermal	
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	4×10^{-6}	--	6×10^{-6}	1×10^{-5}
			Dioxin TEQ	3×10^{-6}	--	9×10^{-7}	4×10^{-6}
			Chemical Total	7×10^{-6}	--	7×10^{-6}	1×10^{-5}
			Sediment Risk (Total)				1×10^{-5}
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	3×10^{-9}	--	4×10^{-7}	4×10^{-7}
			Dioxin TEQ	2×10^{-8}	--	2×10^{-9}	2×10^{-8}
			Chemical Total	2×10^{-8}	--	4×10^{-7}	4×10^{-7}
			Surface Water Risk (Total)				4×10^{-7}
Total Risk						1×10^{-5}	

Scenario Timeframe: Future		Receptor Population: Recreational User					
Receptor Age: Adult							
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk			Exposure Routes Total
				Ingestion	Inhalation	Dermal	
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	4×10^{-7}	--	2×10^{-6}	2×10^{-6}
			Dioxin TEQ	3×10^{-7}	--	3×10^{-7}	6×10^{-7}
			Chemical Total	7×10^{-7}	--	2×10^{-6}	3×10^{-6}
			Sediment Risk (Total)				3×10^{-6}
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	7×10^{-10}	--	1×10^{-7}	1×10^{-7}
			Dioxin TEQ	3×10^{-9}	--	2×10^{-9}	5×10^{-9}
			Chemical Total	4×10^{-9}	--	1×10^{-7}	1×10^{-7}
			Surface Water Risk (Total)				1×10^{-7}
Total Risk						3×10^{-6}	
Total Risk (Adult, Adolescent, and Child)						Total Risk (All Ages)	2×10^{-5}

Table 7-8: Risk Characterization Summary for RME - Non-Cancer Hazards
Grasse River Superfund Site

Scenario Timeframe: Current/Future		Receptor Population: Local Angler		Receptor Age: Adult		Non-Cancer Hazards		
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Fish (Reaches 4 - 8)	Fish	Fish	PCBs	Immune	160	--	--	160
			Dioxin TEQ	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	3			3
			Chemical Total		163	--	--	163
Fish Hazard (Total)								163
Total Hazard Index								163
Total (Immune) HI =								160
Total (Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates) HI =								3.0

Scenario Timeframe: Current/Future		Receptor Population: SRMT Angler		Receptor Age: Adult		Non-Cancer Hazards			
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total	
Fish (Reaches 7 - 8)	Fish	Fish	PCBs	Immune	614	--	--	614	
			Sediment	PCBs	Immune	0.8		0.80	0.8
			Chemical Total		615	--	0.80	615	
Fish Hazard (Total)								615	
Total Hazard Index								615	
Total (Immune) HI =								615	

Scenario Timeframe: Current/Future		Receptor Population: Recreational User		Receptor Age: Child (1 to 6 Years)		Non-Cancer Hazards		
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Sediment (Reaches 4-8)	Sediment	Sediment	PCBs	Immune	0.6	--	0.48	1.1
			Dioxin TEQ	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	0.2		0.02	0.2
			Chemical Total		0.8	--	0.5	1.3
Sediment Hazard (Total)								1.3
Surface Water (Reaches 4 - 8)	Surface Water	Surface Water	PCBs	Reduced Birth Weight	0.00064	--	0.041	0.04
			Dioxin TEQ	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	0.00081		0.00095	0.0018
			Chemical Total		0.0006	--	0.04	0.04
Surface Water Hazard (Total)								0.04
Total Hazard Index								1
Total (Immune) HI =								1.1
Total (Reduced Birth Weight) HI =								0.04
Total (Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates) HI =								0.2

Table 7-8: Risk Characterization Summary for RME - Non-Cancer Hazards

Scenario Timeframe: Current/Future		Receptor Population: Recreational User		Receptor Age: Adolescent (7 to 18 years)		Non-Cancer Hazards		
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	Immune	0.58	--	0.88	1.5
			Dioxin TEQ	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	0.1		0.05	0.1
			Chemical Total		0.6	--	0.9	1.5
			Sediment Hazard (Total)					1.5
Surface Water (Reaches 4 - 8)	Surface Water	Surface Water	PCBs	Reduced Birth Weight	0.00062	--	0.08	0.08
			Dioxin TEQ	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	0.00078		0.000013	0.001
			Chemical Total		0.0006	--	0.08	0.08
			Surface Water Hazard (Total)					0.08
Total Hazard Index								1.6
Total (Immune) HI =								1.6
Total (Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates) HI =								0.1

Scenario Timeframe: Current/Future		Receptor Population: Recreational User		Receptor Age: Adult		Non-Cancer Hazards		
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Primary Target Organ	Ingestion	Inhalation	Dermal	Exposure Routes Total
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	Immune	0.065	--	0.33	0.4
			Dioxin TEQ	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	0.017		0.02	0.03
			Chemical Total		0.082	--	0.348	0.4
			Fish Hazard (Total)					0.4
Surface Water (Reaches 4 - 8)	Surface Water	Surface Water	PCBs	Reduced Birth Weight	0.00014	--	0.027	0.03
			Dioxin TEQ	Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates	0.23		0.00027	0.23
			Chemical Total		0.23	--	0.03	0.26
			Fish Hazard (Total)					0.26
Total Hazard Index								0.7
Total (Immune) HI =								0.4
Total (Reduced Birth Weight) HI =								0.03
Total (Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates) HI =								0.3

Table 7-8: Risk Characterization Summary for CTE
Grasse River Superfund Site

Scenario Timeframe: Future Receptor Population: Local Angler Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards						
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total			
Fish (Reaches 4 - 8)	Fish	Fish	PCBs	3×10^{-5}	--	--	3×10^{-5}	immune	9.9	--	--	9.9			
			Chemical Total	3×10^{-5}	--	--	3×10^{-5}	immune	9.9	--	--	9.9			
			Fish Ingestion Risk (Total)				3×10^{-5}				Fish Hazard (Total)				9.9
			Total Risk				3×10^{-5}				Total Hazard Index				9.9

Non-Cancer HI by Target Organ for Adult	
Total (Immune) HI =	9.9

Scenario Timeframe: Future Receptor Population: SRMT Angler Receptor Age: Adult

Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards			
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total
Fish (Reaches 7 - 8)	Fish	Fish	PCBs	7×10^{-4}	--	--	7×10^{-4}	immune	67	--	--	67
	Sediment	Sediment	PCBs	4×10^{-6}	--	--	4×10^{-6}	immune	0.35	--	--	0.35
			Chemical Total	7×10^{-4}	--	--	7×10^{-4}	immune	67	--	--	67.35
	Fish Ingestion Risk (Total)				7×10^{-4}				Fish and Sediment Hazard (Total)			
Total Risk				7×10^{-4}				Total Hazard Index				67.4

Non-Cancer HI by Target Organ for SRMT Adult	
Total (Immune) HI =	67.4

Scenario Timeframe: Future Receptor Population: Recreational User Receptor Age: Child (1 to 6 years)

Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards						
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total			
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	1×10^{-7}	--	2×10^{-7}	3×10^{-7}	immune	0.4	--	0.2	0.6			
			Chemical Total	1×10^{-7}	--	2×10^{-7}	3×10^{-7}	immune	0.4	--	0.2	0.6			
			Sediment Risk (Total)				3×10^{-7}				Sediment Hazard (Total)				0.6
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	1×10^{-10}	--	9×10^{-9}	9×10^{-9}	Reduced Birth Weight	0.00016	--	0.02	0.02			
			Chemical Total	1×10^{-10}	--	9×10^{-9}	9×10^{-9}	Reduced Birth Weight	0.0002	--	0.02	0.02			
			Surface Water Risk (Total)				9×10^{-9}				Surface Water Hazard (Total)				0.02
			Total Risk				3×10^{-7}				Total Hazard Index				0.6

Non-Cancer HI by Target Organ for Child	
Total (Immune) HI =	0.6
Total (Reduced Birth Weight) HI =	0.02

Table 7-8: Risk Characterization Summary for CTE

Scenario Timeframe: Future		Receptor Population: Recreational User		Receptor Age: Youth (7 to 18 years)								
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards			
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	3×10^{-7}	--	8×10^{-7}	1×10^{-6}	immune	0.15	--	0.44	0.6
			Chemical Total	3×10^{-7}	--	8×10^{-7}	1×10^{-6}	immune	0.2	--	0.4	0.6
			Sediment Risk (Total)				1×10^{-6}	Sediment Hazard (Total)				0.6
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	3×10^{-10}	--	4×10^{-8}	4×10^{-8}	Reduced Birth Weight	0.00015	--	0.02	0.02
			Chemical Total	3×10^{-10}	--	4×10^{-8}	4×10^{-8}	Reduced Birth Weight	0.0002	--	0.02	0.02
			Surface Water Risk (Total)				4×10^{-8}	Surface Water Hazard (Total)				0.02
			Total Risk				1×10^{-6}	Total Hazard Index				0.6

Non-Cancer HI by Target Organ for Youth	
Total (Immune) HI =	0.6
Total (Reduced Birth Weight) HI =	0.02

Scenario Timeframe: Future		Receptor Population: Recreational User		Receptor Age: Adult								
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards			
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	3×10^{-8}	--	3×10^{-7}	3×10^{-7}	immune	0.016	--	0.17	0.2
			Chemical Total	3×10^{-8}	--	3×10^{-7}	3×10^{-7}	immune	0.0	--	0.2	0.2
			Sediment Risk (Total)				3×10^{-7}	Sediment Ingestion Hazard (Total)				0.2
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	6×10^{-11}	--	1×10^{-8}	1×10^{-8}	Reduced Birth Weight	0.000035	--	0.0066	0.007
			Chemical Total	6×10^{-11}	--	1×10^{-8}	1×10^{-8}	Reduced Birth Weight	0.00004	--	0.007	0.01
			Surface Water Risk (Total)				1×10^{-8}	Surface Water Hazard (Total)				0.01
			Total Risk				3×10^{-7}	Total Hazard Index				0.2

Total Risk (Child, Youth, Adult)

2×10^{-6}

Non-Cancer HI by Target Organ for Adult	
Total (Immune) HI =	0.2
Total (Reduced Birth Weight) HI =	0.01
Total (Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in	0.2

Table 7-9: Risk Characterization Summary for CTE
Grasse River Superfund Site

Scenario Timeframe: Future		Receptor Population: Local Angler		Receptor Age: Adult											
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards						
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total			
Fish (Reaches 4 - 8)	Fish	Fish	PCBs	3 x 10 ⁻⁵	--	--	3 x 10 ⁻⁵	immune	9.9	--	--	9.9			
			Chemical Total	3 x 10 ⁻⁵	--	--	3 x 10 ⁻⁵	immune	9.9	--	--	9.9			
			Fish Ingestion Risk (Total)				3 x 10 ⁻⁵				Fish Hazard (Total)				9.9
			Total Risk				3 x 10 ⁻⁵				Total Hazard Index				9.9

Non-Cancer HI by Target Organ for Adult	
Total (Immune) HI =	9.9

Scenario Timeframe: Future		Receptor Population: SRMT Angler		Receptor Age: Adult										
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards					
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total		
Fish (Reaches 7 - 8)	Fish	Fish	PCBs	7 x 10 ⁻⁴	--	--	7 x 10 ⁻⁴	immune	67	--	--	67		
			Sediment	Sediment	PCBs	4 x 10 ⁻⁶	--	--	4 x 10 ⁻⁶	immune	0.35	--	--	0.35
					Chemical Total	7 x 10 ⁻⁴	--	--	7 x 10 ⁻⁴	immune	67	--	--	67.35
			Fish Ingestion Risk (Total)				7 x 10 ⁻⁴				Fish and Sediment Hazard (Total)			
Total Risk				7 x 10 ⁻⁴				Total Hazard Index				67.4		

Non-Cancer HI by Target Organ for SRMT Adult	
Total (Immune) HI =	67.4

Scenario Timeframe: Future		Receptor Population: Recreational User		Receptor Age: Child (1 to 6 years)											
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk				Primary Target Organ	Non - Cancer Hazards						
				Ingestion	Inhalation	Dermal	Exposue Routes Total		Ingestion	Inhalation	Dermal	Exposue Routes Total			
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	1 x 10 ⁻⁷	--	2 x 10 ⁻⁷	3 x 10 ⁻⁷	immune	0.4	--	0.2	0.6			
			Chemical Total	1 x 10 ⁻⁷	--	2 x 10 ⁻⁷	3 x 10 ⁻⁷	immune	0.4	--	0.2	0.6			
			Sediment Risk (Total)				3 x 10 ⁻⁷				Sediment Hazard (Total)				0.6
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	1 x 10 ⁻¹⁰	--	9 x 10 ⁻⁹	9 x 10 ⁻⁹	Reduced Birth Weight	0.00016	--	0.02	0.02			
			Chemical Total	1 x 10 ⁻¹⁰	--	9 x 10 ⁻⁹	9 x 10 ⁻⁹	Reduced Birth Weight	0.0002	--	0.02	0.02			
			Surface Water Risk (Total)				9 x 10 ⁻⁹				Surface Water Hazard (Total)				0.02
			Total Risk				3 x 10 ⁻⁷				Total Hazard Index				0.6

Non-Cancer HI by Target Organ for Child	
Total (Immune) HI =	0.6
Total (Reduced Birth Weight) HI =	0.02

Table 7-9: Risk Characterization Summary for CTE

Scenario Timeframe: Future		Receptor Population: Recreational User		Receptor Age: Youth (7 to 18 years)									
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk			Primary Target Organ	Non - Cancer Hazards					
				Ingestion	Inhalation	Dermal		Exposue Routes Total	Ingestion	Inhalation	Dermal	Exposue Routes Total	
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	3×10^{-7}	--	8×10^{-7}	1×10^{-6}	immune	0.15	--	0.44	0.6	
			Chemical Total	3×10^{-7}	--	8×10^{-7}	1×10^{-6}	immune	0.2	--	0.4	0.6	
			Sediment Risk (Total)						1×10^{-6}	Sediment Hazard (Total)			0.6
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	3×10^{-10}	--	4×10^{-8}	4×10^{-8}	Reduced Birth Weight	0.00015	--	0.02	0.02	
			Chemical Total	3×10^{-10}	--	4×10^{-8}	4×10^{-8}	Reduced Birth Weight	0.0002	--	0.02	0.02	
			Surface Water Risk (Total)						4×10^{-8}	Surface Water Hazard (Total)			0.02
			Total Risk						1×10^{-6}	Total Hazard Index			0.6

Non-Cancer HI by Target Organ for Youth	
Total (Immune) HI =	0.6
Total (Reduced Birth Weight) HI =	0.02

Scenario Timeframe: Future		Receptor Population: Recreational User		Receptor Age: Adult									
Medium	Exposure Medium	Exposure Point	Chemicals of Concern	Carcinogenic Risk			Primary Target Organ	Non - Cancer Hazards					
				Ingestion	Inhalation	Dermal		Exposue Routes Total	Ingestion	Inhalation	Dermal	Exposue Routes Total	
Sediment (Reaches 4 - 8)	Sediment	Sediment	PCBs	3×10^{-8}	--	3×10^{-7}	3×10^{-7}	immune	0.016	--	0.17	0.2	
			Chemical Total	3×10^{-8}	--	3×10^{-7}	3×10^{-7}	immune	0.0	--	0.2	0.2	
			Sediment Risk (Total)						3×10^{-7}	Sediment Ingestion Hazard (Total)			0.2
Surface Water (Reaches 4-8)	Surface Water	Surface Water	PCBs	6×10^{-11}	--	1×10^{-8}	1×10^{-8}	Reduced Birth Weight	0.000035	--	0.0066	0.007	
			Chemical Total	6×10^{-11}	--	1×10^{-8}	1×10^{-8}	Reduced Birth Weight	0.00004	--	0.007	0.01	
			Surface Water Risk (Total)						1×10^{-8}	Surface Water Hazard (Total)			0.01
			Total Risk						3×10^{-7}	Total Hazard Index			0.2

Total Risk (Child, Youth, Adult)

2×10^{-6}

Non-Cancer HI by Target Organ for Adult	
Total (Immune) HI =	0.2
Total (Reduced Birth Weight) HI =	0.01
Total (Decreased sperm count and motility in men exposed to TCDD as boys / Increased TSH in neonates) HI =	0.2

Table 12-1: Cost Estimate Summary for the Selected Remedy (Alternative 6)

Cost Item	Quantity	Unit Cost (\$)	Unit	Cost (\$)
Initial Mobilization – Dredging and Capping (year 1)	1	2,900,000	LS	2,900,000
Mobilization – Dredging and Capping (year 2-4)	3	750,000	LS	2,250,000
Access Area Development/Restoration	3	150,000	LS	450,000
T1-T21 Dredging Near Shore Sediments	25,900	300	In-situ CY	7,770,000
T21-T72 Dredging Near Shore Sediments	82,800	360	In-situ CY	29,808,000
Silt Curtain System Materials/Installation/ Removal/Additional Silt Curtain Setup for Near Shore Dredging Activities	5,000	373	LF	1,865,934
T1-T72 Debris Removal	2,718		In-situ CY	1,878,900
T1-T72 Sediment Dewatering	108,700	100	In-situ CY	10,870,000
T1-T72 Water Treatment	108,700	30	In-situ CY	3,261,000
T1-T72 Expanded Landfill Design and Permitting, Construction, Site Improvement	1	2,800,000	LS	2,800,000
T1-T72 Transportation and Disposal of Sediments at On-Site Landfill	100,000	66	In-situ CY	6,630,000
T1-T72 Transportation and Disposal of Sediments Off-Site	8,700	163	In-situ CY	1,419,840
T1-T21 Near Shore Clean Backfill to Grade	25,900	186	In-situ CY	4,816,116
T1-T21 Armored Cap Main Channel Sediments	59	400,000	Acre	23,520,000
T21-T72 Near Shore Clean Backfill to Grade	82,800	205	In-situ CY	16,936,364
T21-T72 Main Channel Cap Sediments	225	165,000	Acre	37,059,000
Silt Curtain System Materials/Installation/ Removal/Additional Silt Curtain Setup for Near Shore Backfilling Activities	1,500	35	LF	52,500
Silt Curtain System Materials/Installation/ Removal/Additional Silt Curtain Setup for Main Channel Capping Activities	10,000	35	LF	350,000
T1-T72 Disposal of Project Related Materials	4,489	136	Tons	610,470
Interim Demobilization (Years 1-3)	3	500,000	LS	1,500,000
Final Demobilization (Year 4)	1	1,100,000	LS	1,100,000
Construction Monitoring/Oversight	28	264,000	Month	7,392,000
Construction Total:				\$ 165,240,123
Routine Engineering Design (15%):				\$ 24,786,019
Construction Contingency (25%):				\$ 41,310,031
Long-Term Monitoring/O&M Program (Present Worth):				\$ 11,800,000
Total (Present Worth):				\$ 243,136,173
Rounded Total (Present Worth):				\$ 243,100,000

The present-worth costs were calculated using a discount rate of seven percent and a thirty-year time interval for the post-construction monitoring and maintenance period;

CY = cubic yards

LF = linear foot

LS = lump sum

Table 13-1: Chemical-Specific ARARs, TBCs, and Other Guidelines

MEDIUM/REGULATION /AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
RIVER WATER		
Clean Water Act [Federal Water Pollution Control Act, as amended]	33 U.S.C. §§ 1251-1387; 40 C.F.R. § 129.105(a)(4)	The ambient water quality criterion for navigable waters is 0.001 ug/L total PCBs.
Clean Water Act [Federal Water Pollution Control Act]	33 U.S.C. §§ 1314(a); 63 Fed. Reg. 68354 (December 10, 1998)	Criterion for continuous concentration (chronic) for PCBs is 0.014 ug/L in freshwater.
New York State Surface Water and Groundwater Quality Standards	New York State Environmental Conservation Law (ECL) Article 15, Title 3 and Article 17, Titles 3 and 8, 6 NYCRR § 703.5	Establishes New York State Water Quality Standards for almost 200 contaminants. For PCBs in surface water, the values are (a) 1×10^{-6} ug/L for protection of health of human consumers of fish; and (b) 1.2×10^{-4} ug/L for protection of wildlife.
AIR		
No promulgated chemical-specific ARARs identified for air.		
SEDIMENT		
St. Regis Mohawk Tribe Sediment Cleanup Standard	Tribal Council Resolution No. 89-19 and Tribal Council Resolution No. 2007-72.	The SRMT has promulgated a 0.1 mg/kg cleanup standard for PCBs in sediments. EPA evaluated the SRMT sediment standard as a “to-be-considered” requirement. The SRMT sediment standard was considered when EPA established a remediation goal for PCBs in fish that is protective of Mohawk health, although it is not being adopted as the cleanup standard for the sediment.

Table 13-2: Location-Specific ARARs, TBCs, and Other Guidelines

REGULATION/ AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
FEDERAL ARARs		
Bald and Golden Eagle Protection Act	16 U.S.C. § 668	Prohibits anyone, without a permit issued by the Secretary of the Interior, from knowingly taking and disturbing any bald eagle (commonly known as the American eagle), any golden eagle, or associated nest and/or egg.
Fish and Wildlife Coordination Act	16 U.S.C. § 622	Whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose, by any department or agency of the United States, such department or agency first shall consult with the US Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State in which the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by prevention loss or and damage to such resources.
Endangered Species Act 1973, as amended	16 U.S.C. §§ 1531-1544; 15 C.F.R. Part 17, Subpart I; 50 C.F.R. Part 402	Federal agencies are required to verify that any action authorized, funded, or carried out by them is not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of a critical habitat of such species, unless such agency has been granted an appropriate exemption by the Endangered Species committee
National Historic Preservation Act	16 U.S.C. §§ 470-470x-6; 36 C.F.R. Part 800	Establishes that response actions must take into account effect on properties currently listed or eligible for inclusion on the National Registry of Historic Places. Requires federal agencies to take into account the effects of their undertakings on historic properties and afford the council a reasonable opportunity to comment on such undertakings. This will include consultation with state and local governments, Indian tribes, and private organizations as necessary. Previous correspondence made with the NYSDEC and the New York State Office of Parks, Recreation, and Historic Preservation which indicated significant archeological sites exist on or in the vicinity of the Site. Additional evaluations will be performed once remedy is selected. These evaluations will include consultation with the St. Regis Mohawk Tribe historic preservation officer.

Table 13-2: Location-Specific ARARs, TBCs, and Other Guidelines (cont'd)

REGULATION/ AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
FEDERAL ARARs (cont'd)		
Coaster Zone Management Act (CZMA)	16 U.S.C. §§ 1451-1465; 15 C.F.R. Parts 923 and 930	Establishes that federal agencies that conduct or support activities that directly affect a coastal use or resource must undertake those activities in a manner that is consistent, to the maximum extent practicable, with State coastal zone management programs that have been approved by the NOAA.
Endangered Species Act 1973, as amended	16 U.S.C. §§ 1531-1544; 15 C.F.R. Part 17, Subpart I; 50 C.F.R. Part 402	Federal agencies are required to verify that any action authorized, funded, or carried out by them is not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of a critical habitat of such species, unless such agency has been granted an appropriate exemption by the Endangered Species committee
Statement of Procedures on Floodplain Management and Wetlands Protections	40 C.F.R. Part 6, Appendix A	Sets forth USEPA's policy and guidance for carrying out Executive Orders 11990 and 11988. <u>Executive Order 11988</u> : Floodplain management requires federal agencies to evaluate the potential effects of actions they may take in a floodplain to avoid, to the extent possible, adverse effects associated with direct and indirect development of a floodplain. Federal agencies are required to avoid adverse impacts or minimize them if no practicable alternative exists. <u>Executive Order 11990</u> : Protection of wetlands requires federal agencies conducting certain activities to avoid, to the extent possible, adverse impacts associated with the destruction or loss of wetlands if a practicable alternative exists. Federal agencies are required to avoid adverse impacts or minimize them if no practicable alternative exists.
New York State Freshwater Wetlands Act	New York State ECL Article 24; 6 NYCRR Parts 662-665	Defines procedural requirements for undertaking different activities in and adjacent to freshwater wetlands, and establishes standards governing the issuance of permits to alter or fill freshwater wetlands. In accordance with CERCLA Section 121(e), a permit is not required for on-site CERCLA response actions, although such response actions must comply with substantive provisions of these regulations.

Table 13-2: Location-Specific ARARs, TBCs, and Other Guidelines (cont'd)

REGULATION/ AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
STATE ARARs (continued)		
New York Endangered Species Act	New York State ECL Article 11, Title 5; 6 NYCRR Part 182	Lists endangered, threatened species and species of special concern. The taking of any endangered or threatened species is prohibited, except under a permit or license issued by NYSDEC. In accordance with CERCLA Section 121(e), a permit is not required for on-site CERCLA response actions. If it is determined that response actions may destroy or degrade the habitat of a New York State-listed endangered or threatened species or cause a "taking" of any endangered or threatened species, such response actions will comply with substantive provisions of these regulations.
New York State Protected Native Plants	New York State ECL Article 9, Title 16, 6 NYCRR Part 193	Lists endangered, threatened, rare, and exploitable vulnerable native plants. All listed species are "protected plants" and may not be removed or damaged without consent. If it is determined that response actions may destroy or degrade New York State-listed protected native plants or cause a "taking" of any protected native plants, USEPA will consult with NYSDEC with respect to substantive requirements that NYSDEC would consider in determining whether to issue a permit in such a case.
New York State Waterfront Revitalization of Coastal Areas and Inland Waterways	New York State Law: Executive Article 42; Sections 910-923	Defines policy on designation of use of coastal and inland waterway resources while preventing the loss of living marine resources and wildlife, diminution of open space area or public access to the waterfront, shoreline erosion, and impairment of scenic beauty or permanent adverse changes to ecological systems.
Federal and STATE TBCs		
USEPA Office of Solid Waste and Emergency Response – Policy on Floodplains and Wetland Assessments for CERCLA Actions, August 1985	OSWER Directive No. 9280.0-2	Superfund actions must meet the substantive requirements of the Floodplain Management Executive Order (E.O. 11988) and the Protection of Wetlands Executive Order (E.O. 11990). This memorandum discusses situations that require preparation of a floodplains or wetlands assessment, and the factors that should be considered in preparing an assessment, for response actions taken pursuant to Section 104 or 106 of CERCLA. For remedial actions, a floodplain/ wetlands assessment must be incorporated into the analysis conducted during the planning of the remedial action. USACE, the federal natural resource trustees, and NYSDEC will be consulted during remedial design and remedial action in order to develop measures to mitigate or avoid impacts to floodplains or wetlands from implementation of the selected remedy.

Table 13-3: Action-Specific ARARs, TBCs, and Other Guidelines

REGULATION/ AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
FEDERAL ARARs		
Clean Water Act [Federal Water Pollution Control Act, as amended]	Section 404(b) of the Clean Water Act, 33 U.S.C. § 1344(b); 40 C.F.R. Part 230	Guidelines for Specification of Disposal Sites for Dredged or Fill Material. Except as otherwise provided under Clean Water Act Section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge with would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. If there is no other practical alternative, impacts must be minimized. Includes criteria for evaluating whether a particular discharge site may be specified.
	Section 404(c) of the Clean Water Act, 33 U.S.C. § 1344(c); 40 C.F.R. Part 231; 33 C.F.R. Parts 320-329	These regulations apply to all existing, proposed, or potential disposal sites for discharges of dredged or fill materials into US waters, including wetlands. Includes special policies, practices, and procedures to be followed by the US Army Corps of Engineers in connection with the review of applications for permits to authorize the discharge of dredged or fill material into waters of the US pursuant to Section 404 of the Clean Water Act. In accordance with CERCLA Section 121(e), a permit is not required for on-site CERCLA response actions, although such activities must comply with substantive requirements of these regulations.
Clean Air Act	42 U.S.C. §§ 7401-7671q; 40 C.F.R. Parts 50, 51, and 52; NAAQs	Identifies emissions requirements for “major” sources of lead, NO _x , CO, PM ₁₀ , and SO ₂ in attainment and non-attainment areas.
Solid Waste Disposal Act, as amended – Regulated Levels for TCLP Constituents	42 U.S.C. §§ 6901-6992k; 40 C.F.R. Part 261	Specifies TCLP constituent levels for identifying wastes that exhibit toxicity characteristics.
Solid Waste Disposal Act, as amended – Standards Applicable to Generators of Hazardous Waste	42 U.S.C. §§ 6901-6992k; 40 C.F.R. Part 262	Includes manifest, record keeping and other requirement applicable to generators of hazardous wastes.
Solid Waste Disposal Act, as amended – Standards Applicable to Transporters of Hazardous Waste	40 C.F.R. Part 263	Sets forth standard for transporters of hazardous wastes, including the receipt of an USEPA identification number and manifesting requirements.
Solid Waste Disposal Act, as amended – Land Disposal Restrictions	40 C.F.R. Part 268	Places land disposal restrictions, including treatment standards and related testing, tracking and record keeping requirements, on hazardous waste(s).

Table 13-3: Action-Specific ARARs, TBCs, and Other Guidelines (cont'd)

REGULATION/ AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
FEDERAL ARARs (cont'd)		
Solid Waste Disposal Act, as amended – Standards for Owners and Operators of Hazardous Wastes, treatment and Storage Facilities	40 C.F.R. Parts 264 and 265	Provides management standards including record keeping, requirements for particular units such as tanks or containers, and other requirements applicable to owners and operators of hazardous waste treatment, storage, and disposal facilities.
Toxic Substances Controls Act (TSCA)	15 U.S.C. § 2605; 40 C.F.R. Part 761	Provides regulations for storage, handling, and disposal of sediment containing PCBs greater than 50 mg/kg.
Hazardous Materials Transportation Law	49 U.S.C. §§ 5101-5127; 49 C.F.R. Part 171	Provides transportation and handling requirements for materials containing PCBs.
Rivers and Harbors Act (Section 10)	33 U.S.C. § 403; 33 C.F.R. Parts 320, 321, and 322	Prohibits unauthorized obstruction or alteration of any navigable water in the US (dredging, fill, cofferdams, piers, etc.). USACE approval is generally required to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of the channel of any navigable water of the US. On-site CERCLA response actions are exempt from permit requirements pursuant to CERCLA Section 121(e), although such activities must comply with substantive requirements of these regulations.
STATE ARARs		
Solid Waste Management Facilities	New York State ECL Article 27, Title 7 6 NYCRR Part 360	New York State regulations for design, construction, operation, and closure requirements for solid waste management facilities.
Standards for Waste Transportation	New York State ECL Article 27, Title 3 6 NYCRR Part 364	Regulations governing the collection, transport and delivery of regulated wastes, including hazardous wastes.
Identification and Listing of Hazardous Wastes	New York State ECL Article 27, Title 9 6 NYCRR Part 371	Establishes procedures for identifying solid wastes which are subject to regulation as hazardous wastes.
Hazardous Waste Manifest System and Related Standards for Generators, Transporters, and Facilities	New York State ECL Article 3, Title 3; Article 27, Title 7 and 9; 6 NYCRR Part 372	Hazardous Wastes Manifest System requirements for generators, transporters, and treatment, storage or disposal facilities, and other requirements applicable to generators and transporters of hazardous waste.
Hazardous Waste Treatment, Storage, and Disposal Facility Permitting Requirements	New York State ECL Article 3, Title 3; Article 27, Title 7 and 9; 6 NYCRR Part 373	Establishes requirements for treatment, storage, and disposal of hazardous waste; permit requirements (from which on-site response actions are exempt, although substantive requirements would be met); and construction and operation standards for hazardous waste management facilities.
Land Disposal Restrictions	New York State ECL Article 27, Title 9 6 NYCRR Part 376	Identifies hazardous wastes that are restricted from land disposal and defines those circumstances under which an otherwise prohibited waste may be land disposed.

Table 13-3: Action-Specific ARARs, TBCs, and Other Guidelines (cont'd)

REGULATION/ AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
STATE ARARs (cont'd)		
Use and Protection of Waters	New York State ECL Article 15, Title 5; Article 17, Title 3; 6 NYCRR Part 608	A permit is required to change, modify, or disturb any protected stream, its bed or banks, or remove from its bed or banks sand or gravel or any other material; or to excavate or place fill in any of the navigable waters of the state. Any applicant for a federal license or permit to conduct any activity which may result in any discharge into navigable waters must obtain a State Water Quality Certification under Section 401 of the Federal Water Pollution Control Act, 33 U.S.C. §1341. In accordance with CERCLA Sections 121(d)(2) and 121(e), neither a permit nor a water quality certification is required for on-site CERCLA response actions, although such actions must comply with substantive requirements of these regulations.
New York State Pollution Discharge Elimination System (SPDES)	6 NYCRR Part 608	Details the specific permit requirements for the discharge of chemicals to the waters of New York State. In general, no person shall discharge or cause a discharge to New York State waters of any pollutant without a permit under the SPDES program. In accordance with CERCLA Section 121(e), a permit is not required for on-site CERCLA response actions, although such actions must comply with substantive requirements of these regulations.
Surface Water Regulations	New York State ECL § 17-0501 and 17-0301; 6 NYCRR Parts 701 and 703	Establishes that it shall be unlawful for any person directly or indirectly, to throw, drain, run or otherwise discharge into such waters organic or inorganic matter that shall cause or contribute to a condition in contravention of applicable standards adopted by NYSDEC pursuant to §ECL 17-0301. ¹²
Air Pollution Control Law	New York State ECL Article 19, Title 3, Promulgated pursuant to the federal clean Air Act, 42 U.S.C. § 7401	Establishes that the emission of air contaminants to the outside atmosphere that jeopardize human, plant, or animal life, or are ruinous to property, or which unreasonably interfere with the comfortable enjoyment of life or property, is prohibited (6 NYCRR 211.2), New York State Air Quality Standards are promulgated at 6 NYCRR Part 257.

¹² 6 NYCRR Part 703.2: When applied to the superfund cleanups, EPA and DEC have developed projects specific numeric turbidity and or TSS criteria during design.

Table 13-3: Action-Specific ARARs, TBCs, and Other Guidelines (cont'd)

REGULATION/ AUTHORITY	CITATION	REQUIREMENT SYNOPSIS
STATE ARARs (cont'd)		
Fish and Wildlife Management Practices Cooperative Program – Polluting Streams Prohibited	New York State ECL § 11- 0503	Establishes that no deleterious or poisonous substances shall be thrown or allowed to run into any public or private waters in quantities injurious to fish life, protected wildlife or waterfowl inhabiting those waters, or injurious to the propagation of fish, protected wildlife or waterfowl therein.
Village of Massena Floodplain Use Permit (to comply with the New York State Emergency Compensation Program and National Flood Insurance Program)	New York State ECL Article 36, 6 NYCRR Part 502 and 44 C.F.R. § 60.3(d)(3)	Establishes that work within a river channel that contains a defined special flood hazard area (i.e., implementation of the ice control structure) requires a floodplain use or development permit issued by the local floodplain use or development permit issued by the local floodplain administrator in order to comply with the requirements of the National Flood Insurance Program. In accordance with CERCLA Section 121(e), a permit is not required for on-site CERCLA response actions, although such actions must comply with substantive requirements of these regulations.

APPENDIX I: NEW YORK STATE CONCURRENCE LETTER

New York State Department of Environmental Conservation

Division of Environmental Remediation

Office of the Director, 12th Floor

625 Broadway, Albany, New York 12233-7011

Phone: (518) 402-9706 • Fax: (518) 402-9020

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Joe Martens
Commissioner

OCT 05 2012

Mr. Walter Mugdan, Director
Emergency and Remedial Response Division
United States Environmental Protection Agency
Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866

Re: St. Lawrence-Grasse River; Massena area Site
Site No.: 645015
St. Lawrence County
Proposed Plan

Dear Mr. Mugdan:

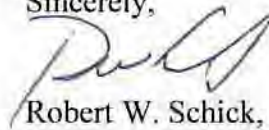
The New York State Department of Environmental Conservation (DEC) and the New York State Department of Health (DOH) have reviewed the September 27, 2012 United States Environmental Protection Agency (EPA) Proposed Plan for the ALCOA, St. Lawrence-Grasse River; Massena area Site, located in Massena, New York. I want to thank you for incorporating DEC's concerns into the proposed remedy, which demonstrates that the EPA shares the State's views on the importance of the cleanup of the Lower Grasse River.

The preferred remedial alternative identified in the Proposed Plan is an appropriate and effective way to mitigate the unacceptable risks that the contaminants pose to public health and the environment. DEC recognizes that the PCB contaminated sediments in the Lower Grasse River are significant ongoing sources of PCBs to the Grasse River. Removal of contaminated near shore sediments is warranted, as there is valuable and diverse vegetation and habitat for aquatic species. The capping in the main channel should be effective in mitigating the impacts of the contaminated sediments there, provided that the engineering evaluations undertaken during the analysis of alternatives are confirmed during the remedial design process. DEC anticipates that, should the design assumptions based upon these engineering analyses require modification; EPA will factor this new information in and in any subsequent evaluations completed as part of the remedial design of the remedy to ensure the protectiveness of the remedy.

It is a point of great importance to DEC that the preferred alternative include measures to ensure the protection of fish and wildlife habitat in the portion of the Grasse River to be disturbed by the remedy, and that the design specifically include a habitat assessment to guide the detailed design of habitat reconstruction. DEC believes that the habitat assessment and reconstruction measures to protect habitat for Grasse River species, including the lake sturgeon, are key elements of the preferred alternative. Given this, DEC expects that its natural resources staff will be directly involved in both the development of the habitat assessment and the determination of appropriate habitat reconstruction measures.

DEC hereby concurs with the EPA's Superfund Proposed Plan for the St. Lawrence-Grasse River; Massena area Superfund Site, dated September 27, 2012.

Sincerely,



Robert W. Schick, P.E., Director
Division of Environmental Remediation

cc: J. LaPadula, EPA
D. Garbarini, EPA
P. Mannino, EPA
Y. Chang, EPA
D. Ripstein, DOH
S. Messier, DOH
J. Drabicki, DEC
W. Daigle, DEC
K. Farrar, DEC
D. Tromp, DEC
R. Quail, DEC
C. Dowd, DEC
C. Grosier, DEC

APPENDIX II: RESPONSIVENESS SUMMARY

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APPENDIX II: RESPONSIVENESS SUMMARY

Grasse River Superfund Site

INTRODUCTION

This responsiveness summary provides a summary of the significant comments and criticisms submitted by the public on the U.S. Environmental Protection Agency's (EPA's) September 2012 Proposed Plan for the Grasse River Superfund Site, and EPA's responses to those comments and concerns. A responsiveness summary is required by the National Oil and Hazardous Substances Pollution Contingency Plan at 40 C.F.R. § 300.430(f)(3)(F). All comments summarized in this document have been considered in EPA's final decision in the selection of a remedy to address the contamination at the Site.

SUMMARY OF COMMUNITY RELATIONS ACTIVITIES

The September 2012 Proposed Plan, which identified EPA's preferred remedy and the basis for that preference, including supporting analyses and information, was made available to the public in the administrative record file at the EPA Superfund Records Center in EPA Region 2's New York City office, the Akwesasne Library, the St. Regis Mohawk Tribe - Environment Division office in Akwesasne, and the Massena Public Library in Massena, NY.

The notice of availability of the above-referenced documents and the announcements of public information sessions and public meeting dates, times, and locations were published in *Indian Time* on October 4, 2012, in the *Daily Courier Observer* on October 4, 2012, and in the *Watertown Daily Times* on October 7, 2012. A news release announcing the Proposed Plan, which included the public information session and public meeting dates, times, and locations, was issued to various media outlets on October 1, 2012. In addition, EPA mailed a letter to river residents in the project area notifying them of the availability of the above-referenced documents and encouraging participation in the scheduled information sessions and public meetings.

After rescheduling of the meetings due to impending inclement weather, notices of the rescheduled public information sessions and public meetings were published in *Indian Time* on November 8, 2012, in the *Daily Courier Observer* on November 8, 2012, and in *the Watertown Daily Times* on November 11, 2012. A news advisory announcing the rescheduled meeting dates, times, and locations was issued to various media outlets on November 5, 2012. In addition, EPA mailed a letter to river residents in the project area on November 1, 2012 notifying them of the rescheduled meeting information. The notice, news advisory and letter also announced EPA's extension of the close of the public comment period from November 15 to November 29, 2012.

On November 14, 2012, EPA conducted a public information session in the afternoon at the Massena Town Hall and a public meeting in the evening at the Massena Central

High School auditorium in Massena to inform local officials and interested citizens about the Superfund process, to review current and planned remedial activities at the Site, to discuss the Proposed Plan, and to listen to and respond to questions and comments from the area residents and other interested parties. A total of over 100 people attended the public meeting and public information session, including residents, local merchants, representatives of the media, representatives of Alcoa and its contractors, state and local government officials, and other interested parties.

Likewise, on November 15, 2012, EPA conducted a public information session in the afternoon at the St. Regis Mohawk School and a public meeting in the evening at the Office for the Aging – Seniors at the Mohawk reservation, Akwesasne. A total of over 70 people attended the public meeting and public information session, consisting of Akwesasne residents, Mohawk tribal members, Mohawk residents of Cornwall Island, Ontario, representatives of the media, representatives of Alcoa and its contractors, and state and local tribal government officials (from the St. Regis Mohawk Tribe and the Mohawk Council of Akwesasne), and other interested parties.

OVERVIEW

EPA's selected remedy includes, among other things, dredging polychlorinated biphenyl (PCB)-contaminated sediment from the near shore portion of the Grasse River containing PCBs at concentrations at or above 1 milligram per kilogram (mg/kg) (estimated to be 109,000 cubic yards) and backfilling of the dredged area to grade. The selected remedy also includes the placement of an armored cap over 59 acres of PCB-contaminated sediment in the upper two miles of the main channel of the Grasse River, where the sediment column is susceptible to scouring due to severe ice jam events, and placement of one foot of capping material over approximately 225 acres of PCB-contaminated sediments in a five-mile stretch of the river immediately downstream of where the armored cap will be placed. While the majority of the public who commented at the public meeting on November 14, 2012, supported the preferred remedy, all of the public who commented at the November 15, 2012 public meeting opposed EPA's preferred remedy and requested either complete dredging of the PCB contamination from the Grasse River Superfund Site and return the Grasse River to its pristine state, or Alternatives 8 or 9 which include some dredging in the main channel along with the dredging in the near shore.

SUMMARY OF COMMENTS AND RESPONSES

Over 400 comment letters were received via fax, email, and U.S. mail during the comment period from September 28, 2012 through November 29, 2012. Copies of the comment letters are provided as a separate attachment to this Record of Decision. A summary of the significant comments contained in the letters and the comments provided at the public meetings of November 14 and 15, 2012, as well as EPA's responses to those comments, are below. Because the purpose of this Responsiveness Summary is to respond to significant public comments submitted on EPA's preferred remedy for the Site, this Responsiveness Summary does not address

comments that raised funding- or liability-related issues concerning implementation of the ROD. EPA notes, however, that Alcoa has been cooperatively performing investigations and other response actions at the Site under an Administrative Order that was issued by EPA in 1989 and amended in 1995. The Administrative Order also provides for Alcoa to perform EPA's selected remedy for the Site.

The Responsiveness Summary includes a summary of comments received during the public meetings and in letters during the public comment period, which concluded on November 29, 2012, responses to the comments, and scanned copies of the comment letters. Copies of the comment letters received during the comment period are provided as a separate attachment to this Record of Decision, see Appendix II-a. Copies of the comment letters received after the comment period ended are also provided as a separate attachment to this Record of Decision, see Appendix II-b. EPA in its discretion has decided to respond to them (to the extent that the comments aren't already addressed in other comment responses and where practicable) despite the fact that they were submitted after the comment period closed.

Copies of the transcripts from the public meetings are available in the Administrative Record, which are available at the following information repositories:

Akwesasne Library
321 State Route 37
Akwesasne, NY 13655
518-358-2240

Massena Public Library
41 Glenn Street
Massena, NY 13662
315-769-9914

St. Regis Mohawk Tribe –Environment Division
449 Frogtown Road
Akwesasne, NY 13655
By Appointment: 518-358-5937

USEPA-Region 2
Superfund Records Center
290 Broadway, 18th Floor
New York, NY 10007-1866
212-637-4308

Site Cleanup

Comment #1: A commenter stated that EPA should choose the “No Further Action” alternative.

EPA Response: Overall protection of human health and the environment is one of two “threshold criteria” which must be met by a selected remedy. Overall protection of human health and the environment at the Site would be achieved by reducing the PCB concentrations in fish and other biota. To accomplish this reduction, remedial alternatives need to address the diffusive flux of PCBs from surface sediments and control sediment stability through dredging, capping, and natural recovery. Each of the alternatives presented, except Alternative 1 (No Further Action) and Alternative 2 (Monitored Natural Recovery), would provide some level of protection of human health and the environment through a combination of active remediation and monitored natural recovery. No Further Action would not be protective of human health and the environment because it is not projected to achieve the interim target concentrations or remedial goals for PCBs in fish within a reasonable time frame, it does not include institutional controls to help reduce exposures in the short-term, and it provides no mechanism for measuring progress towards achievement of the interim target concentrations and remedial goals.

Comment #2: Some commenters stated that a capping remedy is protective of human health and the environment, and will provide an effective, long-term solution to PCB contamination in the river.

EPA Response: Alternative 3 (Capping) is an all-capping remedy that relies on effective cap placement and maintenance to isolate PCB-contaminated sediments, followed by monitoring and maintenance of the caps, for the protection of human health and the environment. Alternative 3 does not include dredging that would deepen the near shore areas before the cap is placed, and placement of the cap would therefore change the original near shore bathymetry and potentially have negative impacts on the near shore habitat. In addition, Alternative 3 would allow PCB inventory to remain in the near shore environment even though dredging can effectively remove the contamination (unlike in the main channel, where bottom conditions prevent complete removal of the contamination). In contrast, the selected remedy permanently removes PCBs from the near shore environment. Near shore areas that are dredged will be backfilled with clean material to grade to return near-shore bathymetry and provide appropriate depth of sediment to allow for habitat re-establishment and species use. Minimal or no residual PCBs are anticipated in the near shore after dredging, eliminating the need for a cap after dredging.

Comment #3: A commenter suggested that the Massena Electric Department (MED) Hydroelectric project would help keep scour to a minimum and enable the remedy to include limited hot spot dredging. Some commenter also suggested that if this option is not available, EPA should select Alternative 5, which includes hot spot dredging in areas where it can be completed and capping in areas where capping is more feasible.

EPA Response: MED submitted an application for the MED Hydroelectric project to the Federal Energy Regulatory Commission (FERC). From the beginning of the

proposal by MED, EPA had informed the public, MED, Alcoa, and other agencies that EPA would not include the MED Hydroelectric project as one of the process options for ice control at the Grasse River Site unless and until FERC had approved the project. MED withdrew the proposed project in 2010.

The commenter suggests that EPA “should select Alternative 5, which includes hotspot dredging...” While EPA has not defined any areas as “hot spot” areas for the Grasse River Site, the areas of higher concentration in the main channel are located predominantly at the bottom 2 to 3 feet of the sediment column, beneath 2 to 3 feet of relatively much cleaner sediment. The areas of higher concentration in the near shore are located predominantly in the 10-16 inch depth. Alternative 5 (*T1-T72 Near Shore Surface Sediment PCBs \geq 10 mg/kg Dredging and Capping between 1 mg/kg and 10 mg/kg, T1-T21 Main Channel Armored Capping and T21-T72 Main Channel Capping*) does not include any hot spot dredging. Although Alternative 5 includes dredging in the near shore where surface sediment PCB concentrations are equal to or greater than 10 mg/kg, this is not “hot spot dredging.” Similarly, the near shore areas that would have been capped under Alternative 5 are not hot spots. Alternative 5 and Alternative 6 (the selected remedy) are identical with respect to remediation of PCBs in the main channel. In contrast to Alternative 5, however, the selected remedy will permanently remove all PCB inventory targeted for dredging in the near shore, with minimal or no residual PCBs anticipated in dredged areas, instead of leaving a portion of that contamination sequestered under a cap, as would be the case in Alternative 5. Unlike Alternative 5, the near shore areas that are dredged under the selected remedy will be backfilled with clean material to grade to provide appropriate depth of sediment to allow for habitat re-establishment and species use. EPA did examine removal of areas with higher PCB mass in Alternatives 7 and 9. However, based on the analysis, EPA’s selected remedy is protective of human health and the environment, and provides the best balance of tradeoffs with respect to the NCP’s balancing and modifying criteria relative to all other alternatives evaluated.

It should also be noted, that while the Non-Time Critical Removal Action (NTCRA) was not defined as a hot spot removal, it did include the dredging of highly contaminated sediments at the surface and at depth in the vicinity of the 001 outfall, which was the primary upstream PCB source in the river. The action was estimated to have removed 27% of total PCB mass in the lower Grasse River.

Comment #4: Several commenters including the Massena Town Council and the Village of Massena Mayor indicated that they support EPA’s proposed remedy, Alternative 6, and that EPA should quickly remediate the Grasse River site.

EPA Response: EPA’s selected remedy is Alternative 6. EPA will work closely with Alcoa and the oversight agencies to remediate the Site quickly and safely.

Comment #5: A commenter stated that EPA should choose Alternative 8, which has some dredging in the main channel.

EPA Response: Alternative 8 differs from the selected remedy in that it calls for dredging of 329,000 cy of contaminated sediment from main channel transects T1-T21, whereas the selected remedy does not include any main channel dredging, and it includes capping of near shore sediments in T21-T72 whereas the selected remedy calls for dredging sediments in this area. Dredging of the main channel T1-T21 would remove PCB mass; however, due to the Site conditions, main channel residual sediment will have high PCB concentrations requiring armored capping after dredging, regardless of the type of equipment used. As with the selected remedy, Alternative 8 therefore relies on the efficacy of the armored cap for the long-term in the T1-T21 main channel. EPA does not believe that mass removal from the main channel T1-T21 would provide any increased risk reduction over the selected remedy because significant PCB contamination would remain under the cap and closer to the cap. For instance, the post-dredging residual sediments in the main channel during the 2005 Remedial Options Pilot Study (ROPS) was 16 inches thick and had an average surface sediment PCB concentration of 150 mg/kg compared to a pre-dredging surface concentration average of 4 mg/kg. In addition, Alternative 8 includes less near shore dredging than the selected remedy, because Alternative 8 requires capping of near shore contaminated sediments in T21-T72, whereas those sediments will be removed by the selected remedy. Therefore, Alternative therefore includes main channel dredging that EPA does not believe is effective and capping of near shore areas that EPA believes can be effectively dredged. As a result, EPA believes that Alternative 8 would be less effective and more costly than the selected remedy.

Comment #6: The SRMT and some other commenters prefer Alternative 9 rather than Alternative 6 because it would result in a five-fold increase in sediment removal compared to Alternative 6 and nearly 50% of the impacted sediment in the main channel upstream of T21, which is most likely to be affected by ice scour, would be removed. The tribal and the federal natural resource trustees (the federal and tribal “Trustees” are the SRMT, U.S. Fish and Wildlife, and the National Oceanic and Atmospheric Administration) stated that the cap construction in Alternative 6 will “significantly” reduce water depths. The Trustees also believe that Alternative 9 is more likely to permanently and reliably achieve the Remedial Action Objectives (RAOs).

EPA Response: Alternative 9 includes dredging in portions of the main channel from ROPS-identified Work Zones 2 and 3, T16.5 to T19.5, T27 to T37 and T43 to T46, resulting in the removal of approximately 525,000 in-situ cy of contaminated sediment from the main channel, whereas the selected remedy (Alternative 6) does not have any main channel dredging. Dredging of the main channel does remove greater PCB mass. As mentioned in Section 2 of the ROD, however, due to the Site conditions where most of the highly contaminated sediment is present over bottom materials such as bedrock, glacial till, and/or marine clay which prevent over-dredging, thereby resulting in PCB residuals with high PCB concentrations that require armored capping or main channel capping (depending on location). Given the likelihood that significant PCB mass would

need to be capped under Alternative 9, and the fact that the armored cap in main channel T1-T21 will be designed to effectively withstand ice scour, EPA does not believe that the addition of main channel dredging affords more protection than the selected remedy. Moreover, main channel dredging is expected to expose deeper, more highly contaminated sediments that cannot be effectively removed due to conditions on the river bottom. By removing less highly contaminated sediments that cover the deeper, more contaminated materials, main channel dredging may actually increase the risk of highly contaminated sediments becoming released into the environment in the unlikely event that a portion of the cap fails. The additional mass removal in the main channel T27 to T37 and T43 to T46 similarly would not be expected to provide any additional long-term benefits or risk reduction compared to the selected remedy.

EPA disagrees with the statement that the capping in the selected remedy will “significantly reduce water depths.” The water depths in the main channel of the Site range approximately from 15 ft to 25 ft. After implementation of the caps in the selected remedy, the water depth is anticipated to be reduced the most by approximately 17% in the upper two miles of the Site. EPA would not characterize reduction of water depth from 15 ft to 12.75 ft as being “significant.” Note that prior to the deepening of the lower Grasse River for power generation in the early 1900s the lower Grasse River water depth was even less than 10 ft.

It is estimated that Alternative 9 would take 3 years longer to implement than the selected remedy (7 yrs. vs. 4 yrs.), and would therefore have a longer duration of short-term impacts to the community and the environment. Alternative 9 also would generate approximately 525,000 cy of additional dredged sediment that would need to be transported off-site for disposal, and is projected to take approximately twice as long as the selected remedy to achieve PCB interim target levels in fish, due to the longer project duration and greater mass of PCBs that would be resuspended as a result of the main channel dredging. For the reasons provided above, EPA does not believe that Alternative 9 is any more likely than the selected remedy to achieve the RAOs.

EPA’s selected remedy includes the same near shore dredging as Alternative 9 in T1-T72, is protective of human health and the environment, and provides the best balance of tradeoffs with respect to the NCP’s balancing and modifying criteria.

Comment #7: A commenter stated that EPA should dredge all of the contaminated near shore and backfill to grade, and place an armored cap on all of the main channel contaminated sediment.

EPA Response: This comment recommends a remedial approach that is identical to the selected remedy with respect to the near shore areas in T1-T72 and in the main channel for T1-T21, but with a different cap recommended in the main channel of T21-T72. In the selected remedy, the T1-T21 main channel cap is armored to provide stability against erosive forces created by severe ice jam events. Ice jam-related scour is primarily of concern from T1 to T19. For purposes of developing remedial

alternatives, however, T21 was used to define the downstream extent of the Grasse River that is potentially subject to ice jam-related scour because a contiguous sediment deposit runs from T19 to T21, and any remedy would be expected to address the contiguous deposit as a whole. T21 is included in both the upstream (T1-T21) and downstream (T21-T72) reaches because the contiguous sediment deposit does not cover all of T21, and therefore, during remedial design it may be necessary to apply the upstream and downstream cleanup criteria to separate areas within T21, depending on the specific sediment characteristics in a particular location.

Evaluation of the T21-T72 main channel area sediment indicates that it is stable even under extreme flow conditions. Mathematical modeling assuming maximum erosion indicated that a 100-year flood event would result in about 0.9 cm (0.35 inch) net erosion, and a 500-year flood event would result in between 1 and 1.5 cm (0.39 to 0.59 inches) of net erosion. Surface sediment in this region is the primary continuing source of contamination to surface water and biota. Based on this understanding, the selected remedy calls for a 12-inch cap composed of a mix of sand and topsoil to provide chemical separation and containment in the T21-T72 main channel. However, as noted in the Proposed Plan, during the design EPA will look closely at sediment stability in the vicinity of T35, T37, T46, and any other areas where evidence of periodic high energy has been observed in the cores. At that time, EPA may determine that capping in these areas should be more robust than a 12-inch sand/topsoil main channel cap. As with all areas of remediation, EPA will optimize the dredging and capping components during remedial design to maximize the immediate risk reduction and long-term effectiveness.

Comment #8: Several commenters suggested that the most highly contaminated portion of the river, the main channel should be dredged and that EPA should choose Alternative 10. Many commenters also suggested that the cleanup of the Site should eliminate all PCB contamination and return the lower Grasse River to its previous pristine condition, regardless of cost.

EPA Response: Alternative 10 includes dredging in all areas with concentrations greater than 1 mg/kg, and armored capping and main channel capping in the main channel where residuals are greater than 1 mg/kg. Alternative 10 is not anticipated to return the lower Grasse River to pristine conditions. Pursuant to the 1989 EPA Order issued to Alcoa and amended in 1995, Alcoa is required to investigate the nature and extent of contamination in the Alcoa Study Area, conduct analysis of alternatives, and perform remedial design and remedial action of the EPA selected remedy, all consistent with CERCLA, NCP, and any relevant EPA guidance. The Superfund program does not require a site to be returned to pristine conditions. Instead, in selecting a remedy for a site, EPA considers the factors set forth in CERCLA § 121, 42 U.S.C. § 9621, by conducting a detailed analysis of the viable remedial alternatives pursuant to the NCP at 40 C.F.R. § 300.430(e)(9), EPA's Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER Directive 9355.3-01, and EPA's A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents, OSWER 9200.1-23.P. The detailed analysis consists of an assessment of

the individual alternatives against each of the nine evaluation criteria at 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis focusing upon the relative performance of each alternative against those criteria. Cost evaluation is one of the balancing criteria by which alternatives are compared. It is true that the sediment in the main channel, particularly the deeper sediment in the main channel, is generally more contaminated than the near shore sediment, however, EPA must evaluate these more highly contaminated sediments in the context of the conceptual site model (CSM) developed for the Site (see ROD Figure 3). A CSM is a representation of the environmental system and the physical, chemical, and biological processes that determine the transport of contaminants from sources to receptors. Based upon the Site CSM, the main channel buried sediments are stable even during major open water high-flow events, such as 100-year flood events. However, the buried sediments upstream of T19 can be scoured during severe ice jam events, such as the one in 2003, which can be effectively addressed by implementing armored cap.

Dredging of the main channel does remove mass; however, due to the Site conditions where presence of most highly contaminated sediment is present over bottom materials such as bedrock, glacial till, and/or marine clay, regardless of the type of equipment used for dredging, residual sediment will have high PCB concentrations requiring armored capping/or main channel capping. Furthermore, Alternative 10 has a longer duration of short-term impacts to the environment and would have more than 1,500,000 cy of dredged sediment that would need to be transported for off-site disposal. At this Site, the mass removal from the main channel does not provide any increased risk reduction to human health nor the environment. Therefore, EPA's selected remedy for the Site provides protection of the human health and the environment and the best balance of tradeoffs with respect to the balancing and modifying criteria.

Comment #9: A commenter asked when construction would begin.

EPA Response: There are a number of steps that need to take place prior to the initiation of full-scale construction. Once the ROD is signed Alcoa will be required to perform a remedial design for the remedy to be submitted for EPA approval. It is anticipated that this design will take approximately 2 years to complete. Alcoa will also need to hire contractor(s) to implement the design. The contractors will need to complete various plans (e.g., work plan, health and safety plan) that will be reviewed by EPA. Dredging and capping is only likely to occur during the April to November timeframe in any given year. It is anticipated that dredging and capping activities will be initiated in the 2015 dredging season, though other construction activities needed to support the dredging, capping and transport or disposal of project related materials could occur sooner.

Dredging and Resuspension

Comment #10: Some commenters stated that the cleanup of the Site should not include any dredging because dredging will resuspend PCBs,

increasing PCB levels in the water column and fish in the near term and lead to a longer recovery; EPA should choose Alternative 3 and only cap the Grasse River.

EPA Response: EPA believes that it is important to remove the PCB contaminated sediments in the near shore and that the benefits of removing the sediments outweighs the concerns regarding the resuspension of PCBs. As noted above, removal of the sediments in the near shore will allow the existing bathymetry to be maintained (after backfilling) whereas capping would result in an increase in elevation in the near shore that would have negative impacts on habitat restoration and would not be consistent with state objectives regarding placement of fill in navigable waters. That being said, EPA is concerned about resuspension and will ensure that measures are implemented to control the amount of resuspension that occurs during dredging. Valuable lessons were learned during the implementation of the NTCRA and the ROPS, where approximately 3% of the PCB mass removed was estimated to be released to the river and transported downstream. Better construction efforts will be implemented to minimize resuspension and capture resuspended solids prior to leaving the Site and entering St. Lawrence River.

Refer also to EPA response to Comment # 2 regarding Alternative 3.

Comment #11: A commenter stated that previous dredging efforts had not gone well and requested that if while dredging the near shore, it goes as previous efforts have gone, then EPA should be prepared to stop.

EPA Response: EPA disagrees with the commenter's characterization that "previous efforts" at dredging the near shore environment went "badly." During the ROPS, an estimated 1,600 cy of contaminated sediment and debris in a 700 foot long portion of the northern near shore was successfully excavated using a conventional mechanical excavator on a barge. The removal area extended from the shoreline into the river approximately 30 feet at its widest point. The northern near shore dredging targeted the removal of one foot of soft sediment between T6 and T7. However, much more material was removed than originally estimated due to survey control issues and embedded debris (rocks, timber, and logs). EPA will require Alcoa to employ best management practices to minimize unnecessary dredging in the near shore.

Comment #12: A commenter stated that dredging performed during the 2005 ROPS was a "disaster" that, while it was well-intentioned, did far more harm than good.

EPA Response: EPA would not characterize the dredging during the 2005 ROPS a "disaster." During the implementation of the 2005 ROPS, approximately 26,000 cy of contaminated sediment, debris, rock and boulders were successfully dredged/excavated from the main channel and northern near shore near transect T7 of the Site and disposed of on-Site at the Secure Landfill Cell 3 located at the Alcoa West facility. The implementation of the 2005 ROPS also provided additional site-specific

information which was integral to the development and revision of the analysis of alternatives and lessons learned which will be used in modifying similar activities (dredging and capping) in the future at the Site.

Comment #13: The SRMT commented that while there were difficulties associated with the Main Channel dredging during the ROPS in 2005, this removal effort was primarily conducted using a horizontal auger hydraulic dredge. Problems were associated with presence of debris, boulders and an irregular river bottom. Although a mechanical dredge was briefly utilized during the ROPS project, limited conclusions were drawn regarding its effectiveness due to the short duration of its work. Because of this and the success of mechanical dredging at recent environmental projects (e.g. Hudson River), it is possible that technology advances since 2005 may lead to improved dredging performance in the Grasse River. In addition, Alternative 9 includes Main Channel sediment removal in the lower section of the river (T27-T37, T43-T46) where core data indicates that sediments are finer grained. These sediment types should allow more effective removal. A couple of commenters also stated that the remediation at the GM and Reynolds Superfund sites encountered similar constraints related to rock and cobble in the channel, but mechanical dredging successfully removed most of the targeted inventory and remaining residual contamination was capped.

EPA Response: EPA disagrees that mechanical dredging equipment may perform better at the Grasse River site based on successes observed at the Hudson River PCBs Superfund site. The same mechanical dredging equipment with the same equipment operators used in the Hudson River would most likely not fare as well at the Grasse River site due to the Grasse River site conditions, where most of the highly contaminated sediment is present over bottom materials such as bedrock, glacial till, and/or marine clay.

In the Hudson River, the average depths of contamination in areas targeted for dredging in Phase 1 of the cleanup (the first dredging season) ranged from 16 inches to 39 inches. The majority of the cores taken from the Phase 1 targeted area had peak PCB concentrations at the top or the middle of the contamination vertical profile, with high PCB concentrations remaining relatively close to the sediment/water interface. More than 40% of the cores taken prior to Phase 1 dredging were “high confidence” cores which captured the entire depth of contamination and indicated that there was uncontaminated sediment below the core that would allow for the possibility for overdredging.

The average depth of contamination is less than 36 inches in most of the areas targeted for dredging in Phase 2 of the Hudson River cleanup. Prior to the start of Phase 2 dredging, more than 66% of the locations targeted during Phase 2 were characterized

by “high confidence” cores which similarly indicated that it would be possible to capture the full PCB inventory in those areas. After 2007, supplemental sampling increased the frequency of “high confidence” cores collected in the Phase 2 areas, furthering the full capture of the PCB inventory. At the Grasse River site, the depth of contamination in the main channel are on the average 60 inches and the peak PCB concentrations are found at the bottom of the contamination vertical profile, on top of material such as bedrock, glacial till, and/or marine clay, which prevent overdredging.

The St. Lawrence River remediation associated with the GM Central Foundry Division site took place in 1995 with an objective to dredge “hot spots...to remove PCBs. All PCB contaminated sediment in the hot spots will be removed given the technological limitations associated with dredging.” The 1990 ROD for OU1 estimated 56,000 cy of contaminated sediment in the St. Lawrence River in the embayment adjacent to the GM facility. The cleanup achieved 13,800 cy of sediment dredged over 6 months, along with removal of cobbles and boulders. However, the cleanup level in the St. Lawrence River was not met in all areas due to high residuals and capping was required in 1.72 acres out of 11 acres of dredged area. Dredging in the embayment of GM site was decided because there were highly mobile hot spots due to high velocity in the location of the hot spots. And due to relatively shallow water depth near the shoreline where armored capping without prior dredging would have significantly changed the bathymetry and the habitat.

The St. Lawrence River remediation associated with the Reynolds Metals site was conducted in 2001 and 2009. After extensive efforts to capture all of the contaminated sediment and even after exceeding the amount of volume dredged from the ROD estimate of 51,500 cy to an actual volume of 86,000 cy, still areas remained where the cleanup goal was not met. One out of the 22 acre area contained a residual PCB level range of 11.1 to 120.5 mg/kg, requiring a cap after 8 dredge passes before determining that the residual PCBs couldn't be removed due to boulders, cobbles and hardpan. Approximately another four acres were also capped due to elevated PAH levels in the sediments. Armored capping without prior dredging in this area also would have significantly changed the bathymetry and the habitat. Capping of dredged sediments comprised approximately 20-40% of the remediated area of the St. Lawrence River at the GM and Reynolds sites.

Armored Cap Placement and Effectiveness

Comment #14: A commenter stated that not knowing how ice scouring is going to affect the river below T21 is of concern. The commenter suggested that if ice scouring were to occur between T21 – T72, all of the cap placed in this section would be removed where the scour occurred, and PCBs would be resuspended into the water column, and potentially resettles on top of caps that are further downstream.

EPA Response: After the March 2003 ice jam event, Alcoa gathered several lines of evidence that led to the conclusion that scouring due to severe ice jam events downstream of T19 is not likely. The following information was used to develop the lines of evidence:

- Review of photos documenting the 2002-2003 winter ice formation and breakup periods
- Review of hydrometeorological conditions during the 2002-2003 winter
- Geophysical surveys of the river bottom
- River-wide collection of sediment samples for physical and chemical characterization
- Collection of river bank soils for PCB analysis
- Monitoring of PCBs in the water column and resident fish
- Manual sediment probing
- Numerical DynaRICE[®] modeling of the 2003 ice scour event and the turbulence generated underneath the toe of the 2003 ice jam
- Underwater videography
- Review of historical information pertaining to the occurrence of past ice jams in the river, including interviews with local residents
- Hindcasting analysis of river flows and ice thickness for past winters
- Surveys of ice-related scarring on trees along the shoreline in the upper (i.e., upstream of Massena) and lower (i.e., downstream of Massena) portions of the river
- Stratigraphic analysis of sediment cores from select areas of the river
- Collection of high-resolution sediment cores for physical and chemical characterization
- Numerical DynaRICE[®] modeling of ice jam formation and breakup in various reaches of the lower river

The principal lines of evidence gathered from the investigations listed above are:

- Tree scar surveys indicate that ice jams are limited to the upper 1.5 miles of the lower Grasse River (to about T16, Figures 4-17 and 4-18 from 2009 Comprehensive Characterization of the Lower Grasse River (CCLGR) Addendum). No evidence of ice jam-related scarring was observed downstream of T16. However, tree scars were noted downstream of T16, but these scars were observed at a height of about 1 to 2 feet above low mean water level, indicating that they are the result of normal sheet ice floes and not from severe ice jam events. Sheet ice occurs during lower river stages, where the ice sheet moves as a unit with little or no major breakup. Tree scars in the lower Grasse River associated with ice jam-related scarring were found approximately 7 feet or more above the low mean water level.
- Comparison of bathymetry data collected before and after the 2003 ice jam event indicates that ice-related sediment scour occurred in select portions of the river bottom in the upper 1.8 miles of the river (between T1 and T19)(Figures 3-4 through 3-6 from 2009 CCLGR Addendum). Figure 3-4 indicates that maximum scour depth of approximately 5 feet was noted between T15 and T16.5 in the immediate vicinity of the ice jam toe. This was confirmed based on monitoring of the area depth prior to, during and after implementation of the 2001 Capping Pilot Study. Figures 3-4

through 3-6 also indicate deposition occurred in other portions of this reach and downstream.

- Evaluation of profiles of high resolution cores for vertical distributions of bulk density, total organic carbon (TOC), percent moisture, percent solids, and PCB levels and stratigraphic analyses with cesium-137 dating of cores from ice scour prone area (T1 to T19) show signs of multiple scour/deposition events (Figures 4-6 through 4-12 from 2009 CCLGR Addendum). For example, cores T7-S and T10M on Figure 4-7 show several sharply defined increases in dry bulk density. These spikes in bulk density are coincident with sharp declines in TOC, indicating these layers are primarily coarser sediments (i.e., sands). Lower percent moisture and higher percent solids measurement also occur in the intervals, providing evidence of sand layers. The coarse layers interspersed in these cores suggest multiple scour/deposition events have occurred. Figure 4-8 shows evidence of three distinct events. Based on the cesium dating of these cores, along with non-episodic sedimentation rates and interpolation between known horizons, one event occurred in 1970's, one in the 1980's and one in 2003. These timeframes correspond with years of known ice jams determined during the tree scar survey. In contrast, stratigraphic analysis of sediment cores collected downstream of T19 compared to the vertical profile cores show no conclusive evidence of past ice jam-related scour events (Figures 4-12, 4-14 through 4-16). The TOC and bulk density vertical profiles of three cores (T23-M, T28M, and T35-N) shown on Figure 4-14 vary with depth and suggest that one or two events have occurred which resulted in deposition of sediment from upstream in this region of the river. In core T35-N, a 6-to 7-inch thick interval of relatively coarse material is observed in the middle of the core, however, it is unclear whether this layer is indicative of a past scour/deposition event. The five stratigraphic cores collected between T35 and T37, contain no evidence of past scour/deposition events, as no continuous sand beds are observed in this stretch of the river (Figure 4-15). The vertical profiles of cores from T48 to T71 (Figure 4-16) do not show any evidence of past disturbances. In each of the cores, the PCB profile with depth is consistent with uninterrupted deposition, gradually increasing PCB concentrations from low levels at the surface to a sharp PCB peak at depth, followed by subsequent decline in concentration below the PCB peak. In addition, the vertical profiles of the physical characterizations in these cores are relatively uniform and show no signs of scour/deposition during episodic events.

However, as stated in the proposed plan and in the ROD, there were a few sediment core samples from the vicinity of T35, T37 and T46 which provided conflicting lines of evidence, and therefore, one could not definitively conclude that scouring due to a severe ice jam event did not occur at these locations. As a result, EPA has noted that during the design further investigation in the vicinity of T35, T37 and T46 is warranted. If additional data gathered during the design indicates any evidence of periodic high energy in the cores then these areas will likely require a more robust cap than a 12-inch sand/topsoil main channel cap. It should also be noted that while various components of the cap were specified in the Analysis of Alternatives (AofA) report and the Proposed Plan, these components will be further evaluated and optimized during remedial design to maximize risk reduction and long-term effectiveness.

Comment #15: The SRMT commented that, bathymetry analysis suggests between 0.5 and 1 foot of erosion may have occurred down to transect T34 and lower as a result of the 2003 ice-jam event (Figure ES-3C, AofA Report, July 2012, same as the attached Figure 3-6 from 2009 CCLGR Addendum). These coarser high energy zones, which were observed at cores located in the vicinity of T35, T37, and T46 also contained elevated PCB concentrations. Although Alcoa initially claimed that these deposits may have been related to dredge residuals related to the deepening of the Lower Grasse River, EPA's consultant (Dave Richardson, Tetra Tech) supports the position that the sediments have been subject to a "flood event that mobilized sand" and that the "layer post dates the PCB contamination" and is "unlikely due to dredging." These data are critical since they establish that water velocities in this reach of the river are high enough to mobilize gravel-sized particles. Two cores near T35 contain 40 – 50% gravel, which indicates that water velocities were periodically high enough to transport gravel sized particles downstream of T21. Based on this evidence, it is doubtful that a cap composed of a sand/topsoil mix will be stable.

EPA Response: As explained in EPA response to Comment #14, the Proposed Plan and the ROD states that there were a few sediment core samples from the vicinity of T35, T37, and T46 which provided conflicting lines of evidence, and therefore, one could not definitively conclude that scouring due to severe ice jam event did not occur at these locations. As a result, EPA has noted that during the design further investigation in the vicinity of T35, T37 and T46 is warranted. If additional data gathered during the design indicates any evidence of periodic high energy in the cores then these areas will likely require a more robust cap than a 12-inch sand/topsoil main channel cap. It should also be noted that while various components of the cap were specified in the AofA and the Proposed Plan, these components will be further evaluated and optimized during remedial design to maximize risk reduction and long-term effectiveness.

Mr. Richardson, a fluvial geomorphologist, had stated that the gravel seen in the cores from T35, T37, and T46 post dates the PCB contamination and river deepening dredging. He had surmised that the sand and gravel source may be localized and from tributaries that are located upstream of the gravel deposition rather than from ice scour transport. However with lack of cores in the vicinity of T35, T37, and T46 and with difficulty in fully recovering the cores, taking additional cores with good recovery during design will help determine the depositional history.

Comment #16: The SRMT stated its preference for Alternative 9 noting that while Alternative 9 would still require armored capping, it would be less reliant on capping since significant main channel sediment removal would occur with Alternative 9 but not Alternative 6 (the selected remedy). The armored cap relies on a "layer-cake" design with an ideal construction of 6 inches of sand/topsoil, 6 inches of gravel,

and 13 inches of stone. SRMT suggested that while uniform construction would be possible in dry conditions, it is not realistic to believe that this layered system could be placed through the water column on an irregular river bottom. SRMT noted that only about one-third of the ROPS test area for the armored capping achieved the design thickness, that cores were not collected to establish the thickness and continuity of the lower 6-inch base layer, and that the integrity of the 6-inch base layer of the cap could be affected by the impact of dropping 10-inch armor stones through the water column onto this layer.

The SRMT also commented that it was more of a concern that the design thickness was only partially achieved during the ROPS armored capping considering that the river bed profile in the area was relatively uniform with a generally consistent water depth of 15 feet. SRMT suggested that there are sections immediately downstream of T16 where the river bottom is much more irregular and effective armored-cap placement would be even more difficult. Therefore the SRMT would prefer that Alternative 9 be implemented as main channel sediments in this section of the river would be subject to dredging.

EPA Response: The objectives of an armored cap placement during the 2005 Remedial Options Pilot Study (ROPS) was to: 1) evaluate constructability issues related to placing an armored cap in the river channel and 2) evaluate (through a laboratory physical model) the ability of an armored cap to withstand estimated forces from potential future ice jam events. Baseline monitoring activities for the armored capping area included sediment sampling, sediment surface elevation and probing measurements along a 25-ft by 25-ft grid, and geotechnical investigations.

During the 2005 ROPS, an armored cap was constructed over a one-acre area between T15 and T16. The armored cap was composed of various layers depending on whether placement was occurring in the upstream or downstream half of the targeted area. The upstream half included a 6-inch base layer, a 6-inch filter layer, and a 13-inch armored layer resulting in a total cap thickness of 25-inches. The downstream half included no base layer, a 6-inch filter layer (placed in two 3-inch layers) and a 13-inch armored layer resulting in a total cap thickness of 19 inches.

Pre-capping sediment surface elevations in the armored cap area were obtained during a multibeam bathymetry survey on September 12-13, 2005. The sediment surface elevations measured during this survey were similar to those from the 2003 multibeam survey (average mean difference of 0.3 ft). Therefore, since the 2005 survey represented the most recent depiction of the river bottom in the armored cap area prior to cap construction, the 2005 multibeam data were used to define the ROPS pre-capping sediment surface elevations in this area (Figure A-12 from ROPS Appendix A).

Sediment surface elevation measurements were collected consistent with the procedures used during the 2005 baseline monitoring event (i.e., elevation measurements were obtained by locating the grid node and surveying the water surface elevation via real time kinematic (RTK) survey techniques and measuring the total water depth) along with the use of a plate affixed to the bottom of the probing rod to account for undulating surfaces. Elevation measurements were conducted over multiple events in the armored cap area between September 24 and October 21, 2005 to assess the sediment bed elevation changes resulting from the placement of cap materials. Limitations associated with working in a river environment do not allow the ability to return to the exact location over multiple sampling rounds, which may introduce variability in the measurements. Further, the vertical accuracy of the RTK survey equipment is approximately 0.2 ft in the river and the water depth measurements were collected to the nearest 0.1 ft.

Each layer had a required target thickness along with allowable tolerances as stated in Engineering Change Notice (ECN) 027 approved by EPA. As a result, a targeted elevation range was calculated at each grid node using the sediment bed elevation, target cap material thickness, and allowable tolerance. An elevation measurement was then obtained at each grid node during cap placement to assess whether an adequate amount of cap material had been placed without exceeding the allowable tolerance (per ECN 027). Surveyors worked real-time in the field with the construction contractor during placement of each cap layer to confirm that proper cap material elevation and thickness was achieved at each grid node.

The required cap thickness was achieved within the allowable range at all grid node locations. All 32 grid nodes of the upstream half of the armored capped area achieved the cap target thickness of 2.1 to 3.1 ft. All 32 grid nodes of the downstream half of the armored capped area achieved the cap target thickness of 1.7 ft to 2.5 ft. See Figure 2-22 from the ROPS for post-capping elevation measurement results for the armored capped area. However, estimates of in-place cap thickness in areas other than grid nodes, obtained by manual elevation measurements, indicate approximately 35% of the upstream half of the cap area (i.e., the half with a base layer) contains a cap thickness in excess of the 2.1-ft minimum; a similar percentage of the area contains a cap thickness within the 2.1- to 3.1-ft target thickness. For the downstream portion of the cap (i.e., without the base layer), approximately 23% of the cap area contains a cap thickness in excess of the 1.7-ft minimum (range of 1.7 to 2.7 ft of target thickness).

Similar to the assessment performed for the main channel dredge/cap area, multibeam bathymetry results collected prior to (September 13, 2005) and after (October 22, 2005) armored cap construction were compared to provide additional information pertaining to the cap thickness in this region. The multibeam bathymetry measurements collected prior to and after cap construction indicate an average cap thickness of 1.89 ft (22.7 in) in the upstream half of the cap area and 1.33 ft (16 in) in the downstream half of the cap area. These measurements do not account for consolidation of underlying sediments that would cause the actual thicknesses to be less than targeted thickness because the targeted thickness outlined in ECN 027 did not account for potential settling. The same

factors that likely contributed to the differences between the point-by-point comparisons and the manual elevation measurements for the main channel post-dredge cap apply here: 1) local adjustments to the cap (in the event the cap thickness at a particular grid node was not within the prescribed tolerance limits) were limited in areal extent; 2) measurement error associated with the manual elevation measurement technique; and 3) consolidation of the in-place cap material and/or native sediment. Additionally, the uneven nature of the armored cap surface (and the associated impact on the manual survey) likely contributed to the observed differences.

The SRMT is correct that no cores were collected to establish the thickness and continuity of the lower 6-inch base layer during the implementation of the ROPS. The thickness of the base layer was not a monitoring criterion set in the operations plan. Instead, as described above, surveyors worked real-time in the field with the construction contractor during placement of each cap layer to confirm that proper cap material elevation and thickness were achieved at each grid node.

To ensure success in meeting the target thickness of the caps, closer grid spacing will be used to verify cap thickness achieved during construction. During remedial work for the nearby Reynolds Metals Superfund site, 10 ft by 10 ft grid spacing was used. For the remediation of the Grasse River site, 10 ft by 10 ft grid spacing also will be used instead of the 25 ft by 25 ft grid spacing used during the implementation of ROPS.

Comment #17: The SRMT believes that there is significant uncertainty associated with the understanding of ice jam geometry and resulting turbulent flow beneath the jams. SRMT states it cannot be ruled out that the bottom of the ice jam itself will actually extend into the river sediment resulting in direct physical contact and gouging of the sediment and that the armored cap could not withstand this type of “plowing” force. The SRMT disagrees with Alcoa’s conclusion that “ice-grounding” did not occur at T16 in 2003, noting that modeling studies of ice jams (Appendix Q of the 2009 CCLGR Addendum) indicate that it could have occurred. Armored capping without dredging the main channel, such as in Alternative 6, would decrease the water depth by about 2 feet after the armored cap is placed in T1 to T21. The SRMT is concerned that this decrease in the water depth would result in even greater erosive forces beneath future ice jams since there will be less area for the water to pass beneath the ice jam toe. In addition, the SRMT believes that there would be a greater likelihood that the ice would gouge the bottom of the sediment and cause scour.

EPA Response: As noted in EPA response to Comment #14, the potential for ice jam scour to occur along the length of the lower Grasse River and the potential impacts that could result from ice jam scour were extensively studied during the AofA. Alcoa used a computer model, DynaRICE[®], to gain information on how ice jams are formed and breakup that cannot be gathered from field observations alone. Appendix Q,

Numerical Modeling of Breakup Ice Jams, in the 2009 CCLGR Addendum Report presents a numerical model study of ice jam formation and breakup and associated flow conditions in the lower Grasse River. The model was calibrated using observed stage height and jam area data for the 2003 ice jam event. Additional validation of the model was accomplished using tree scar data. The ice jam event of 2003 was caused by high water discharge at the time of the breakup ice run, together with a large ice supply and intact ice cover on the lower Grasse River.

The DynaRICE[®] model simulates the coupled dynamics of ice motion and water flow, including the flow through and under the ice rubble. The model, however, does not consider thermal effects, such as the melting of ice mass. The results of these ice jam simulations were therefore considered to be conservative with respect to 2003 conditions. Also, the DynaRICE[®] model assumes that the sediment bed is non-moveable and rigid, which means that erosion and deposition processes under the ice jam are not accounted for even though erosion and deposition do occur. This limitation means that the model may under-predict the water depth at the toe of the ice jam and, hence, over-predict current velocities. In addition, the model may over-predict the areas of ice jam grounding; partial grounding near the toe of the ice jam may not have been predicted if the sediment bed movements were accounted for in the model. Thus, the model should be considered to produce conservative results with respect to potential impacts on the sediment bed (as existed in 2003), e.g., scour and grounding.

In cases of severe grounding where ice pieces gouge the sediment bed, a linear feature is created. No evidence of partial grounding, such as those observed in Lake Erie (Grass, J.D. 1984. *Ice Scour and Ice Ridging Studies in Lake Erie*) was found in the bathymetry data collected after the 2003 ice jam event. The Lake Erie observations have been associated with wind-driven pressure ridges that thickened to full depth and were then moved by the wind. These events left distinctive linear gouges in Lake Erie, typically with a cross section profile showing a gouged depression and gouged material piled on both sides. Evaluation of the lower Grasse River bathymetry after the 2003 event showed no such linear features. This, along with the underwater video which showed little to no sediments in between the stones in the Test Cell Subcell#1D within the Capping Pilot Study area (the location where the model conservatively predicted partial grounding), support the conclusion that hydraulic forces and not gouging by ice were the primary cause for the scour observed in 2003. It is very unlikely that gouging of sediment from ice occurred during the 2003 ice jam event.

The CCLGR Appendix Q, Section 2.1.3., states that the DynaRICE[®] model simulated the accumulation of ice upstream of the specified jam toe location at T16 during the 16-hour period between 4:30 pm on March 27 and 8:30 am on March 28, 2003. The model predicted that the ice jam had reached a state of equilibrium by 8:30 am on March 28, and was not increasing in size. The predicted stage height was 49.8 m [163.4 ft] at T1, which agreed with the observed stage height at that time. The predicted upstream extent of the ice jam also agreed favorably with the observed extent of the jam. The longitudinal distributions of predicted water level, ice thickness and current velocity at 8:30 am on March 28 are shown on Figure 2.10 in CCLGR Appendix Q. The toe of the

ice jam was about 4-5 m [13.1 ft to 16.4 ft] thick, with typical water depths under the ice of about 1 m [3.3 ft]. In the vicinity of the toe, the toe of the ice jam was predicted by the model to be partially grounded (Figure 2.11). As discussed previously, some uncertainty exists in the capability of the model to predict grounding accurately due to the model's assumption that the sediment bed is non-moveable. Grounding is necessary for gouging to occur. Gouging would require a lateral force that is not present in the system, a gravitational force imposed by a sloped bed. The distribution of water depths under the ice in the vicinity of T16 is shown on Figure 2.14.

The ice jam at T16 released sometime between 8:30 am on March 28 and 8:30 am on March 29, 2003. For purposes of the calibration simulation, it was assumed that the ice jam release occurred at 12:30 am on March 29. The reduction in ice mass due to melting was not considered in the simulation. Model results at five different times after the jam release are shown on Figures 2.17 through 2.21. The sudden ice jam release formed a surge of water, with a peak velocity of about 2 meters per second (m/s) [6.6 ft/s], during the initial 15 minutes after 12:30 am. By 1:00 am, peak current velocity had dropped to about 1 m/s [3.3 ft/s] as the surge dissipated; the surge due to the ice jam release reached the downstream boundary, *i.e.*, the confluence with the St. Lawrence River, within 30 minutes. The model predicted that the ice rubble would not be cleared out of the river by the end of the simulation, *i.e.*, by 4:30 am on March 30; this result is not consistent with the observed behavior on the river, where the ice jam moved out much faster. This inconsistency is caused by the fact that ice melting is not reflected in the model.

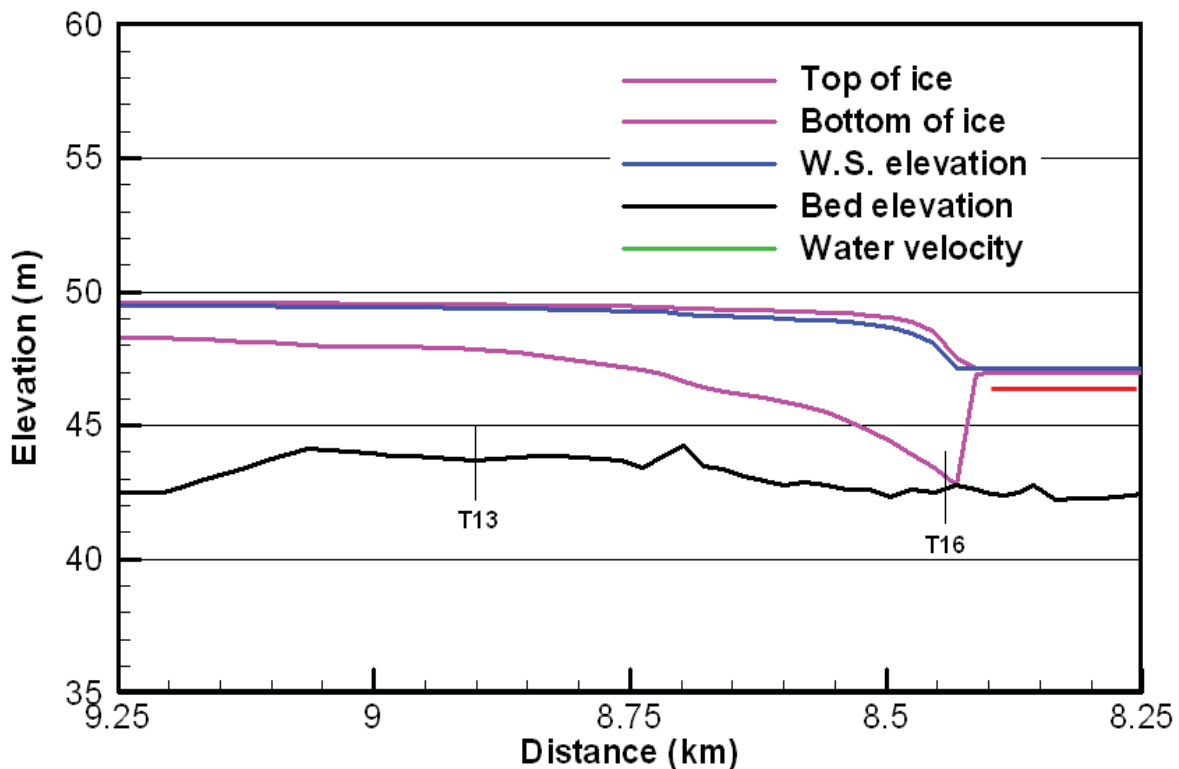
The SRMT states that an armored cap cannot withstand a potential gouging or "plowing" from ice. The armored cap implemented during the 2005 Remedial Options Pilot Study was designed to withstand the type of forces created under the toe of the 2003 ice jam event, which was the most severe ice jam event on record. It is believed to be similar to a one-in-100-year event and the highest force produced amongst the past ice jam events based on the tree scar survey. Note that in general, the impacts from grounding or gouging are much smaller than the effects of scour from hydraulic forces. Caps can be designed to withstand "plowing" forces created by gouging ice. The predominant concern of grounding is the restriction of the flow area, which increases velocities and shear. The model conservatively estimates the shear since the bed is assumed to be rigid though it is not. In turn, the armoring is conservatively sized to handle the shear forces. It should also be noted that while various components of the cap were specified in the AofA and the Proposed Plan, these components will be evaluated further and optimized during remedial design to maximize risk reduction and long-term effectiveness.

The SRMT also states that placement of an armored cap approximately two-feet thick on top of the existing sediment without prior dredging would create even greater erosive forces beneath future ice jams and create a greater likelihood that the ice would gouge the bottom of the sediment and cause scour. Prior modeling conducted to simulate hydrodynamic conditions during an ice jam provides the information needed to evaluate the effects of shallowing of the river bottom (as a result of armored capping) on

velocities beneath an ice jam (as reported in Appendix Q of the 2009 *CCLGR Addendum*). In summary, placement of an armored cap without prior dredging is not expected to significantly alter ice jam-related forces in the main channel areas of the river.

Figure 2.10 from Appendix Q of the 2009 *CCLGR Addendum* shows the results of DynaRICE[®] simulations for the 2003 jam event with the toe located at T16. The net effect of adding the armored cap to the T1 to T21 reach is the reduced water depth downstream of the toe of the jam and upstream of T21, and a corresponding lower elevation of the downstream ice cover that initiates a jam, shown in red in amended Figure 2.11 below (note that the elevation scale must be changed by dropping it 0.6 meters). This is equivalent to the conditions modeled in Appendix Q Figure 3.30.

Figure 2.11 - Ice Jam Profile (amended to show reduced water surface elevation downstream of jam)



In terms of the changed behavior of the ice jamming, this elevation change of the downstream ice cover level is the major difference between the simulation using current bathymetry and the post-armoring bathymetry. When ice breakup jams were modeled using DynaRICE[®], the effect of changes in water depth was examined for cases of downstream water levels of +0.5 meters and -0.5 meters relative to the normal level used in the simulations. The -0.5 meters case is nearly identical to the case of armoring except that the sensitivity test reduced the water depth by -0.5 meters rather than the armoring case of -0.6 meters.

The ice thicknesses, water depths under ice and under-ice velocities for the normal level are shown in Figure 2.13 (ice thickness) of Appendix Q, Figure 2.14 (water depth beneath jam) and Figure 2.15 (velocity under jam). The results for the sensitivity test with the downstream level changed by -0.5 m are shown in Figure 3.30 (ice jam profile), and Figure 3.32 (velocity distribution under ice). To compare velocity distribution under ice for the present bathymetry with velocity distribution for bathymetry with armoring, compare Figure 2.15 (present bathymetry) and Figure 3.32 (approximating armoring bathymetry). There are very slight differences. The maximum current velocity for the reduced downstream water level (equivalent to the armoring case) was 1.6 m/s, which differs from the unarmored bathymetry case by only 0.1 m/s (6.7% increase). There was no change in under ice velocity for the case where the downstream elevation was increased by 0.5 meters relative to the normal downstream water level. Thus the under ice-velocities were not sensitive to downstream water depth over a range of 1 meter.

Similarly, there were minor changes in the thickness of the jam upstream of the toe under the different conditions. However, in both the present bathymetry case and the armoring bathymetry case, increased flow in the near shore areas (< 5 feet depth relative to the normal downstream level) did not occur until well upstream of the toe of the jam and at locations where the water depth beneath the ice was several meters and, thus, had relatively low velocities since the cross section area of flow was large at these locations.

While the simulated water level difference of 0.5 meters is slightly different from the water level difference of 0.6 meters with armoring, the very slight change in difference of 1.0 meter (0.1 m/s change relative to 1.6 m/s average velocity beneath the toe region of the jam) strongly suggests that running additional simulations using a -0.6 meter change instead of the -0.5 meter change would not result in significant differences.

The physical explanation for such little change is the result of many of the factors that go into determining the thickness of the jam and the resulting water levels. These factors are intrinsic in the DynaRICE[®] modeling. In simple terms, the system acts as a “free surface,” and the top surface of the jam and the associated water levels are “free” to move vertically. The geometry of the jam and the associated water levels are set by the bottom elevation and the level of the downstream ice cover elevation. Thus, with the armored cap in place, the ice is higher and the cross-section available for flow under the ice is relatively unchanged.

The forces on the river bottom during an ice jam depend on the open-water cross-section under the jam (i.e., the cross-section available for water flow). This cross-section is the net result of ice accumulation and the forces working to erode the ice at the underside of the jam. The ice accumulates until the increasing water velocity in the shrinking open-water cross-section reaches a level that prevents additional ice from attaching to the underside of the jam. The practical implication of there being a velocity that limits ice accumulation is that the maximum velocities and forces on the river bottom would not be reduced if the T1-T21 main channel were dredged prior to placing armor stone to protect against ice jam-related forces. So long as there is

sufficient ice supply, the jam will tend toward what can be described as the “stable open water cross-section.” Because this cross-section is not sensitive to an increased water depth produced by dredging, dredging would have an insignificant effect on the bottom forces associated with a jam. All scenarios modeled in Appendix Q contained sufficient ice supplies to create this condition; the scenarios with greater ice supplies simply resulted in thicker and longer jams. It is likely that ice jams in the lower Grasse River would have sufficient supply to achieve the stable condition, even if the river cross-section were expanded by dredging.

Comment #18: A commenter noted that given events such as Superstorm Sandy and the ice storm in 1998, one cannot discount the very likelihood of future very extreme events which could affect the behavior of the Grasse River and questioned whether the choice of alternatives had been evaluated against future climate change events and suggested that extreme weather should be accounted for in the cap design.

EPA Response: EPA has considered extreme weather events in the AofA based upon information gathered from extensive Site specific investigations. The investigations included examination of the fate and transport of PCBs in the Grasse River under ice conditions (as explained in EPA response to Comment #14) and under non-ice conditions. Under non-ice conditions, erosion potential was modeled for 100-year and 500-year flood events. Field observations support the multiple modeling efforts performed for the Site. Monitoring the Site prior to and after the high-flow event of 1998 referred to by the commenter, which approximated a 100-year flood event, indicated that there were no discernable long-term impacts on the PCB levels in sediment, water, or fish tissue resulting from the high flow event. The Site hydrodynamic model predicted velocities of about 2.5 to 4.5 feet per second (ft/s) and 2.0 to 2.5 ft/s in the main channel and near shore areas, respectively, during a 100-year flood event, which supports the conclusion that the river velocities remain too low to cause significant erosion even when high river flows or storm events occur. Using the maximum erosion during a 100-year flood (i.e., conservatively estimated at about 0.9 cm), the maximum estimated erosion during a 500-year flood event was calculated to be between 1 and 1.5 cm. Therefore, even under extreme flow conditions, little sediment resuspension is anticipated.

EPA anticipates the selected remedy components will withstand severe ice jam events, such as the one that occurred in 2003, and the 100-year and 500-year flood events, and will ensure that climate change and the potential for extreme weather events will be taken into consideration during the remedial design.

Severe Ice Jam Scour Prevention

Comment #19: A commenter asked if ice jams could be managed either to prevent jams, to hold jams above the polluted site, or to steer the ice

towards the shore and prevent the jam from scouring contaminated sediment?

EPA Response: After the March 2003 ice jam event, Alcoa investigated several ice control options for the Site. Several structural and non-structural options were evaluated to prevent contaminated sediment from scouring due to ice jam events. A pier-type ice control structure (ICS) at transect T6.75 was identified as a potentially viable long-term option to prevent the formation of ice jams. Extensive studies were performed, including simulations using a physical model at the US Army Corps of Engineers Cold Regions Research and Engineering Laboratory and a numerical model study by Clarkson University. Though the modeling studies indicated that the ICS at transect T6.75 could address ice jam-related sediment scour, because of potential risks to recreational users of the river (e.g., snowmobilers and boaters), this technology option was not retained for evaluation with other remedial alternatives.

In 2007, Alcoa conducted an ice breaking demonstration project which involved breaking the intact ice cover in an approximate 7-mile stretch of the lower Grasse River. This project was seen as a potential interim measure for mitigating ice jam scour. Although the project was successfully completed, EPA decided not to use ice breaking as an interim measure in the future due to the relatively high risk to public and worker safety associated with ice breaking as compared to the risk averted from a potential ice jam event.

After evaluating these efforts it was concluded rather than focusing on preventing ice jam events as part of the remedy, EPA determined that a safer and more effective alternative would be to incorporate measures into the remedy to mitigate the potential impacts that an ice jam event could have on the remedy; as a result the selected remedy includes armored capping to address scour from severe ice jam events.

Comment #20: A commenter noted that in retrospect, EPA should agree that the MED's hydroelectric dam project would have been the most beneficial environmental solution as it would have addressed potential scour from severe ice jam events.

EPA Response: Please see EPA's response to comment #3, above.

Impacts to Drinking Water

Comment #21: The SRMT commented that if the proposed remedy is selected it will need many more millions of dollars to ensure the safety of the SRMT water supply.

EPA Response: Figure 4-2 from the 2009 *St. Lawrence River Remediation Project Completion Report* shows the approximate location of the water intake for the SRMT water treatment plant at Akwesasne. The intake is located along the southern shore

(Raquette Point) of the St. Lawrence River over two miles from the confluence of the Grasse River and the St. Lawrence River. The Grasse River Site in its current unremediated state does not pose a danger to the SRMT water supply. The implementation of the selected remedy is not anticipated to have any negative impact on the SRMT water supply. The implementation of the selected remedy will result in less resuspension of PCBs than would occur under alternatives that involve main channel dredging. It should be noted that during the implementation of the Reynolds Metals site remediation on the St. Lawrence River in 2009, Alcoa collected and analyzed water intake samples at the Alcoa East (former Reynolds Metals) plant, the GM plant, and the SMRT Water Treatment Building (both raw and filtered). Total PCB (Aroclor) results for all samples were below corrective action levels at all intake locations as there were no detections in any water intake samples collected during the Reynolds Metals remediation monitoring activities. EPA Method 8082 was used and the method detection limit was 0.065 ug/L. The maximum contaminant level for PCBs set for the drinking water standard at SRMT Water Treatment Plant is 0.5 ug/L, which is a national primary drinking water regulation limit for PCBs. Surface water will be monitored during construction of the selected remedy to ensure the safety of the SRMT's water supply.

Comment #22: Mohawks residing on Cornwall Island in Ontario, Canada and the Mohawk Council of Akwesasne (Mohawk Government Office representing Mohawks residing on Cornwall Island) stated their concerns about impacts to their community's water intake which is on the St. Lawrence River and only several hundred yards away from the confluence of the Grasse River and the St. Lawrence River.

EPA Response: ROD Figure 1 (Site Location Map) shows the approximate location of the water intake for the Mohawks on Cornwall Island. EPA does not anticipate that the cleanup will have any impact to the Cornwall Island water intake. Surface water will be monitored during construction to ensure the safety of the Mohawk water supply on Cornwall Island. EPA notes that the work plan for the 2009 Reynolds Metals site remediation called for sampling of the Mohawk Council of Akwesasne water intake on Cornwall Island only if the corrective action triggers were exceeded at the SRMT's intake on Raquette Point. Because there were no exceedances observed during the monitoring activities, including at the SRMT intake, no sampling was required at the water intake on Cornwall Island.

Human Health

Comment #23: A commenter stated that a scientist from the EPA suggested that it is normal for a woman's breast milk to have a certain level of PCBs and then asked when it was ever normal to have PCBs in breast milk, or to have any PCBs in the human body.

EPA Response: EPA is unaware of any documents or statements by EPA regarding human breast milk and normal levels of PCBs such as those suggested in the comment. The Baseline Human Health Risk Assessment for the Site did not identify a normal level of PCBs in human tissues (i.e., blood, human milk, etc.) as suggested in the comment. That being said, epidemiological studies have been conducted by various organizations that evaluate concentrations of PCBs in human milk to allow for comparisons of concentrations between two groups and to assess changes in concentrations over time. Studies such as those conducted by NYSDOH (Fitzgerald et al., 1998) provide an example of the types of statistical comparison of the human milk concentrations that are evaluated in these studies. The study by Fitzgerald et al. (1998) provided information on total PCB concentrations among SRMT individuals compared with the control group that included nursing mothers who lived in Warren or Schoharie County and gave birth during the same time period and exposed to PCBs at background levels. The analysis showed statistical comparisons of the two groups and did not identify a “normal concentration” as suggested in the comment.

Databases can be searched to identify what an average concentration of PCBs might be in human milk from a given population, for example New York State. However, because a study identifies an average concentration in a given population, it does not infer that it is normal to have such concentrations.

Comment #24: A few commenters asked whether the Power Canal and/or Robinson Creek pose a risk to human health or the environment.

EPA Response: The 1993 *Revised Risk Assessment ALCOA Study Area* calculated cancer risks and non-cancer health hazards from exposures to PCBs through ingestion of fish from Reach 3 which is the Massena Power Canal. Investigative efforts in the Power Canal were initially performed in 1991 as part of the River and Sediment Investigation (RSI) Phase I activities. Fish monitoring results for samples collected from the Power Canal averaged 0.5 mg/kg (wet weight) and sediment samples collected from the surface averaged less than 1 mg/kg. The calculated risks from fish ingestion were 5×10^{-3} based on a cancer slope factor of $7.7 \text{ (mg/kg-day)}^{-1}$. The non-cancer hazard for Reach 3 was 0.002. The 1993 risk assessment concluded that there was no risk associated with exposure to either sediment or surface water of the Power Canal due to lack of access (i.e., nearly vertical banks).

Updating the cancer risk calculations to reflect the current cancer slope factor of $2 \text{ (mg/kg-day)}^{-1}$ and an updated ingestion rate of 32 grams/day results in a cancer risk for the Power Canal of 7×10^{-4} , which is above the risk range identified in the NCP. The updated non-cancer hazard index (HI) from ingestion of fish within Reach 3 based on an updated fish ingestion rate to 32 g/day and the current oral Reference Dose for Aroclor 1254 of $2 \times 10^{-5} \text{ mg/kg-day}$ that was not available in 1993 results in a non-cancer HI of 41.6, which exceeds the goal of protection of one. The current risks from the Power Canal are expected to be less than those calculated with 1991-1992 data based on the lower concentrations in fish observed since 2006.

In 2002, EPA requested that Alcoa collect smallmouth bass from the Power Canal as part of the Supplemental Remedial Studies Program fish trend monitoring. Data for adult smallmouth bass from these collection events are summarized in the following table.

Total PCB Concentrations in Smallmouth Bass
(1991 and 2002 through 2011; mg/kg wet weight of filet)

<u>Year</u>	<u>Average</u>	<u>Maximum</u>
1991	0.5	1.9
2002	0.8	1.5
2003	Adequate fish could not be located for sample	
2004	0.6	1.7
2005	0.6	1.6
2006	0.3	0.7
2007	0.1	0.3
2008	0.2	0.7
2009	0.1	0.3
2010	0.2	0.4
2011	0.1	0.4

Though the fish tissue levels have come down, fish in the Power Canal are still contaminated and the NYSDOH fish consumption advisory advises that men over 15 years of age and women over 50 can “eat up to one meal per month” of smallmouth bass caught from the Massena Power Canal. NYSDOH advises women under 50 and children under 15 to eat no fish from the Power Canal. Power Canal sediment, surface water, and fish will continue to be monitored.

One of the Alcoa West Facility’s five permitted outfalls (Outfall 008) discharges stormwater and treated wastewater to Robinson Creek, which is referred to as Reach 9 in the 1993 risk assessment. The risk assessment evaluated incidental ingestion of and dermal contact with sediment and surface water from Robinson Creek by waders (waders were evaluated instead of swimmers because the shallow depth of water precludes swimming). The carcinogenic risk estimate of 6×10^{-6} for exposures to PCBs in sediments in Robinson Creek was within the NCP target risk range. Non-carcinogenic effects from PCBs in sediments are unlikely to result from exposure to sediments in Robinson Creek as evidenced by a hazard index below one. Carcinogenic risk from ingestion of surface water in Robinson Creek was not calculated because the creek is too shallow for swimming, thus making incidental ingestion unlikely. Carcinogenic risk from dermal contact with surface water in Robinson Creek was not calculated due to a lack of available toxicity values. The non-carcinogenic maximum hazard index from dermal contact with surface water from wading in Robinson Creek was calculated to equal one for the child and below one for the adult. Aluminum was the main contributor to the hazard index. Appendix G of the AofA includes updated toxicity values which indicate that the non-cancer hazard index is below one for the young child and adult.

The maximum aluminum concentration in the creek was 840 mg/L. Although detected concentrations of aluminum and lead were above chronic ambient water quality criteria (AWQC) within Robinson Creek, these metals were not detected in filtered surface water samples. Therefore, aluminum and lead may not be present in a bioavailable form to aquatic biota inhabiting Robinson Creek. No further monitoring is planned for Robinson Creek.

Comment #25: A representative from Cancer Action N.Y. stated: In 2010, the World Health Organization (WHO) published *Persistent Organic Pollutants Impact on Child Health*. POPs, which are persistent organic pollutants, include PCBs. It is the position of Cancer Action N.Y. that governmental and public health entities, including the EPA must provide the people of the Akwesasne and the Village of Massena with a warning that POPs pose a health hazard. Any strategy to minimize POPs exposure must include educational outreach to parents and children that are subject to avoidable POPs exposure.

EPA Response: The Baseline Human Health Risk Assessment evaluated cancer risks and non-cancer health hazards associated with PCBs and dioxins at the Grasse River Site. Outside of the Superfund process, EPA has evaluated a number of actions regarding POPs based on EPA's regulatory authority. EPA's activities regarding POPs are described on the webpage:

<http://www.epa.gov/international/toxics/pop.html#domestic>

These regulatory actions, along with voluntary efforts by U.S. industries, have resulted in a greater than 85 percent decline in total dioxin and furan releases from known industrial sources after 1987. This webpage also identifies actions being carried out under other federal legislation by other federal agencies.

Regarding the Site, EPA continues to inform the public regarding the NYSDOH fish consumption advisories for the lower Grasse River and the Power Canal, and has conducted public outreach regarding the investigation and remediation of the Site. The selected remedy relies on the continuation of the NYDOH fish consumption advisories and also calls for institutional controls (ICs) to help limit exposure and modify behavior. The ICs will take the form of informational devices that would include outreach programs to inform the public to limit activities that could compromise the integrity of the cap (such as dredging) and to promote knowledge of and voluntary compliance with the fish consumption advisories.

EPA notes that the commenter separately asked the New York State Department of Health for information about NYSDOH's activities regarding POPs. NYSDOH responded previously to the commenter in letters dated February 19, 2010 and July 20, 2011.

Comment #26: A commenter raised the following questions regarding health concerns: How did EPA determine that PCBs are the chemical of concern at the Site? What other persistent hazardous waste is there? Does EPA's plan focus on anything else besides the PCB contaminated sediment?

EPA Response: In accordance with EPA's Superfund regulations, EPA conducted a human health risk assessment to evaluate potential cancer risks and non-cancer health hazards associated with exposures to contaminants in the Grasse River. EPA evaluated risks from metals, volatile organic compounds, base neutral chemicals such as semi-volatile organic contaminants, PCBs, and dioxins. However, chemicals other than PCBs and dioxins did not pose risks above the risk range of 10^{-6} to 10^{-4} and/or a HI greater than 1. The evaluation of risks from all chemicals detected for various receptors (i.e., anglers catching and consuming fish and other recreational use of the river) found the risks exceeding the risk range for cancer or a non-cancer HI were associated with PCBs and consumption of fish. In Reaches 4 through 8 a non-cancer HI of 3 was associated with exposure to dioxins. Analysis of these data indicates that dioxins were only found in fish and not sediment. Moreover, dioxins were only found in one of the 14 fish sampled. Details regarding the selection of COCs are available in the 1993 Revised Risk Assessment ALCOA Study Area and the update to the 1993 Risk Assessment provided in Appendix G to the AofA (also refer to Section 7.1 Human Health Risk Assessment of the ROD and the ROD Tables 7-1 through 7-9 summarizing the risks and hazards). EPA believes that the remedy selected for this site is protective of human health and the environment, in that the unacceptable human health and environmental risks will be addressed by implementation of the remedy. (Should any unacceptable risks be identified in the future that would not be addressed by implementation of the remedy, EPA retains the authority to address such risks.)

Comment #27: A commenter raised the following question regarding health concerns: Will the NYSDOH be involved in sort of an ongoing comparison of the broader population and this population, in looking specifically at conditions that would be associated with exposure to PCBs or other chemicals at the Site?

EPA Response: Though this comment is not related to EPA's Proposed Plan, following is the response given by NYSDOH: The Grasse River area is the subject of many epidemiological studies conducted by the New York State Department of Health and the Agency for Toxic Substances & Disease Registry publications including several that evaluated PCBs and other contaminant exposures among the Mohawk men, women, and children at Akwesasne. No additional studies are planned at this time. See also EPA response to comment #30 below for discussion regarding Public Health Assessments.

Comment #28: A commenter asked whether people should be concerned about being in contact with the water in the Grasse River for many hours while kayaking or canoeing.

EPA Response: The Baseline Human Health Risk Assessment evaluated potential cancer risks and non-cancer health hazards associated with exposures to sediments and surface water during recreational activities. The assessment assumed exposures of 13 days/year for a young child (1 to 6 years of age) and adults (older than 18 years) and 39 days/year for adolescents (7 to 18 years). The assessment assumed exposures for periods of time of 12 years for the adult and adolescent and 6 years for a young child. The assessment also assumed a swimming event that would last for 2 hours on each of the days identified above and that surface water would be ingested every hour at a rate of 50 milliliters. In addition, the total body surface area available for contact with surface water was assumed to be the 50th percentile body surface area for adults (20,000 centimeter squared (cm²)), children (6,640 cm²) and adolescents or youths (13,500 cm²). The assessment also evaluated potential exposures while wading into the river to swim. The results of this analysis found that under these conditions the risks were within or below the risk range used by the Superfund program to determine the need for remedial action. Therefore, it would follow that risk from coming in contact with water from the Grasse River site for many hours while kayaking or canoeing will also be within or below the risk range. Further information on these evaluations is provided in Appendix G to the AofA, the 2002 Human Health Risk Assessment Update and the ROD Tables 7-1 through 7-9 summarizing the risks and hazards.

Comment #29: A commenter asked why the NYSDOH database does not show the cancer rates for Hogansburg or Rooseveltown, New York, although such information is available for other locations in the state.

EPA Response: Though this comment is not related to EPA's Proposed Plan, following is the response given by NYSDOH to the commenter as a follow-up from the public meeting in Akwesasne.

Hogansburg cancer incidence information can be found under Franklin County at the webpage: www.health.ny.gov/statistics/cancer/registry/zipcode/index.htm.

Hogansburg incidence information includes the 13683 zip code for Rooseveltown, NY.

Information regarding incidence of colorectal, female breast, lung, bronchus, and prostate cancers can be found on the above referenced webpage. Additionally, the link below is where one can find cancer incidence for small areas from the NYS Environmental Facilities Map. Type in the interested zip code and the page should zoom to the appropriate area. There are three clickable small areas within Hogansburg on the map.

https://apps.nyhealth.gov/statistics/cancer/environmental_facilities/mapping/map

Comment #30: A commenter asked why EPA did not conduct a health study to inform EPA's decision for the Site.

EPA Response: EPA assumes the term "health study" is referring to the Public Health Assessments that are conducted by the Agency for Toxic Substances and

Disease Registry and not epidemiological studies that were addressed previously in EPA response to comment #27.

EPA does not conduct health studies or assessments at sites since CERCLA Section 104(i)(6) requires these types of studies be conducted by the Agency for Toxic Substances and Disease Registry (ATSDR). ATSDR conducts a health assessment for a site when the site is listed on the National Priorities List (NPL). ATSDR did not conduct a health assessment for the Grasse River Site because the Site is not on the NPL. However, individuals may petition ATSDR to conduct a health assessment. Information about the petition process is available at: http://www.atsdr.cdc.gov/hac/products/pha_petition.html.

Under the Superfund program, EPA relies on risk assessment to make decisions at Superfund sites. Risk assessments differ from health assessments, described above, in that they are quantitative, chemical-oriented characterizations that use statistical and biological models to calculate numerical estimates of risk to health. Risk assessments characterize the probability that adverse health effects will result from exposures to environmental hazards. The requirements for human health risk assessments are outlined in the National Contingency Plan (NCP), 40 C.F.R. Part 300, and 40 C.F.R. § 300.430(d)(4).

Other Comments/Questions

Comment #31: A commenter asked if bioremediation can be used to address the PCB contamination at the Grasse River site in conjunction with the armored cap and cap in the main channel.

EPA Response: EPA is not aware of bioremediation technology appropriate for use in-situ to address the PCB contamination in the Grasse River. Alcoa did not evaluate bioremediation, but did evaluate the effectiveness of an activated carbon application to sequester PCBs in sediments and reduce PCB flux from sediment and uptake by biota. Additional information can be found in the Activated Carbon Pilot Study Documentation Report in the administrative record.

Comment #32: A member of the Massena Remedial Advisory Committee for the St. Lawrence Area of Concern charged with advising NYSDEC on plans to restore beneficial uses to the Area of Concern, requested that some data for Beneficial Use Indicators (BUIs) be gathered that would provide documentation of the status of the indicators and suggested that the required five-year reviews might provide additional information on BUI recovery.

EPA Response: The selected remedy includes monitoring of habitat and biota recovery and all data gathered during remedy implementation will be available to the

public. The data parameters utilized for remedy implementation will be finalized as part of the remedial design and may include data related to BUIs.

Comment #33: A resident on County Route 42 (Massena Center Road) asked if the “ditch” that runs between two lots of the resident’s property and into the Grasse River was contaminated and would be addressed.

EPA Response: EPA received further detail from the commenter after the public meeting at Massena. The creek the commenter was referring to is the Unnamed Tributary, which discharges to the lower Grasse River near transect T27. The Unnamed Tributary was remediated in 1998 as part of the remedial activities selected in two records of decision issued by NYSDEC in 1991 and 1992 (later amended in 1994) for fourteen areas of contamination on and adjacent to the Alcoa West Facility. Remediation of the Unnamed Tributary included removal of 1,500 cubic yards of PCB containing sediment over 400 feet linear feet of creek, rerouting of Outfall 002 discharges (except for flows greater than the 50-year, 24-hour storm) to a surface impoundment, and the cleaning and sliplining of 6,100 linear feet of pipeline.

Comment #34: A commenter noted that the Massena Power Canal has PCB contamination in the sediment and asked if the PCB contamination in the Power Canal would impact the Grasse River after EPA’s selected remedy is implemented.

EPA Response: The commenter is correct; the Massena Power Canal does contain some PCB-contaminated sediment. The 1992 *Phase I Grasse River, River and Sediment Investigation* Report states that sample recovery was very difficult in the Power Canal and generally, sediment was obtained only from the 0- to 3-inch interval, and that only a thin layer of sediment was found. As discussed above in EPA response to Comment #24, a risk assessment was performed for the Power Canal in 1993, and continued monitoring of Power Canal water, sediment and fish is planned as part of the selected remedy.

The Power Canal releases a small flow of water to the lower Grasse River upstream of the Alcoa West Facility. The water column PCB concentrations in the Power Canal averaged 7.9 ng/L in 1995 and 1.9 ng/L in 2002. Though the fish from the Power Canal have been monitored annually since 2003, the water column has not. Since extensive upland source control was completed in 2001, State Pollution Discharge Elimination System (SPDES) monitoring data collected for Outfall 003 (which discharges to the Power Canal) indicate a negligible (less than 0.1 percent) contribution of PCB mass to the lower Grasse River. Sediment samples collected from the Power Canal pre-1994 ranged from non-detect to 2 mg/kg, with two exceptions of 5.4 and 5.9 mg/kg. The average PCB concentration in the top 3 inches of sediment was less than 1 mg/kg. Based on all the data and fish tissue levels observed for the past five years, and knowing that there is only a limited amount of sediment in the Power Canal, EPA does not believe that the contaminants in the Power Canal pose a threat to the remediation of

the Grasse River. As stated earlier, continued monitoring is planned for the Power Canal.

Comment #35: A commenter noted that during the 1995 “experimental” dredging at Outfall 001, clamshell buckets scooped up soil from the bottom of the river and disposed of it outside the county. The commenter thought that there was difficulty getting at the contaminants because of the presence of cobbles and boulders and questioned whether the presence of armored cap material would deter EPA from deciding to remove the contaminated sediments in the future if capping was found to be ineffective.

EPA Response: The 1995 dredging of sediment and debris in the vicinity of Outfall 001 was performed during NTCRA. As mentioned above, the objective of NTCRA was to remove the highest levels of PCBs in the upstream portion of the Alcoa Study Area. Dredging was not “experimental” as the commenter states. A secondary objective of the NTCRA dredging was to obtain site-specific data such as dredging capability and effectiveness.

A clamshell bucket was not used during the NTCRA and no contaminants were sent outside of the Alcoa West Facility’s Secure Landfill. During the NTCRA, Alcoa removed, dewatered, and disposed of approximately 2,600 in-situ cy of sediments and approximately 400 cy of debris and boulders from a one-acre area. A mechanical excavator was used to remove boulders and debris, and a horizontal auger dredge was used to remove soft sediment. Hand-held hydraulic dredging equipment was used for sediment removal in an area immediately adjacent to Outfall 001. All of the dredged and excavated materials were disposed of in Alcoa’s on-site Secure Landfill.

Alcoa did experience difficulty with dredging in this area due to the uneven/rocky and hardpan nature of the river bottom conditions near Outfall 001. After multiple passes with the dredge equipment, an average of 4 inches (up to 14 inches in some areas) of sediment remained. Approximately 6 inches of sediment remained where hand-held dredging equipment was used.

EPA’s selected remedy has an armored capping component in the main channel of the approximate upper two miles of the Site. The armored cap will be appropriately designed, constructed, and monitored such that EPA does not anticipate failure. However, if for whatever reason in the future it is determined that a portion of the cap has failed, the underlying contamination can be reached by removing the armored cap to perform further remedial work. The existing armored cap material would not deter EPA from requiring whatever work is necessary to ensure that the remedy is effective.

Comment #36: A commenter noted EPA has been studying the Grasse River site for over twenty years and questioned why so much time and money is being put into the Grasse River remediation; the commenter suggested it couldn’t just be related to the fact that people shouldn’t

eat fish from the Grasse River but must be associated with the high cancer rates and the thyroid disease in the North Country or other serious matters.

EPA Response: Many complicated Superfund sites take over a decade of investigation before a proposed plan is issued to the public. EPA was prepared to issue a proposed plan for the Grasse River site in 2003. However, in March 2003, scouring occurred at the Site due to the severe ice jam event discussed elsewhere in this Responsiveness Summary, a phenomenon which the technical team was not aware of at the time. The new significant information required the team to perform further investigations in order to have a better understanding of the ice jam event, the potential for future ice jams to affect the Site, and to develop appropriate ways to address the problem. The time and money spent to study the Site and propose a remedy was due to the complexity of the Site, and was unrelated to cancer incidence rates, thyroid disease, or any other concerns not related to PCB exposure at the Site. EPA believes that the PCB contamination in the sediments and in the fish presents a significant risk to human health and the environment and is a serious and complex matter that must be carefully and thoroughly studied and remediated.

Comment #37: A member of the Citizens Advisory Panel (CAP) noted that EPA indicates that armoring has been very effective, and that ice scour events occur every eight to ten years, but had previously understood that scour events occurred once every hundred years.

EPA Response: The commenter is correct. Armored caps have been utilized at other sites and have been found to be very effective at addressing high erosive forces, even in extreme cases. And yes, investigations show that ice jam events severe enough to scour parts of the upper 1.8 miles of Site sediment have occurred at a frequency of about once every eight to ten years. The commenter may have misunderstood what was said at a CAP meeting regarding the frequency of scour events. EPA has never stated that scour events occur once every hundred years. The commenter may have recalled discussions at CAP meetings, in which EPA described erosional study results from one-in-100 year flood events and from one-in-500 year flood events, which consider erosion from increased open water high-flow events rather than under ice conditions.

Comment #38: A commenter asked what would cause EPA to change its decision from proposed Alternative 6 to another alternative, and wanted to know how much of an impact tribal government and community input would have on the EPA's decision making for this Site as compared to the Massena local government and community.

EPA Response: EPA would reassess a proposed remedy if, for example, EPA receives new information during the public comment period which indicates that the proposed remedy does not satisfy the threshold remedy selection criteria (i.e., protection of human health and the environment and compliance with ARARs (unless a

waiver is justified), or does not provide the best balance of tradeoffs among the other alternatives with respect to the remaining remedy selection criteria. See 40 C.F.R. § 300.430(f)(1). In arriving at a selected remedy for a site, EPA considers comments from all members of impacted communities. As is evident from the summary of comments found in this Responsiveness Summary, EPA received many comments in support of the proposed remedy or a less intrusive remedy with less dredging, as well as many other comments suggesting that EPA should require more dredging. As discussed elsewhere in this Responsiveness Summary (EPA responses to Comments 5, 6 and 8), EPA does not believe that other alternatives advocated by commenters are more protective than the selected remedy, or offer a better balance of tradeoffs among the other remedy selection criteria.

EPA sought comments on the selected remedy from all interested community members and the actions taken to solicit public comment are described more fully in the Summary of Community Relations Activities section at the beginning of this Responsiveness Summary. EPA also consulted with governmental authorities, including actively engaging with the St. Regis Mohawk Tribe on a government-to-government basis throughout the remedy development and selection process.

Comment #39: A commenter offered his perspective that the relationship between Alcoa and the Akwesasne community is strained as a result of a renovation program conducted last summer which excluded the Akwesasne labor force and inquired as to whether EPA could require or recommend that future renovation and remediation works be classified as native content works as a means to ensure employment and contracting opportunities for members of Akwesasne.

EPA Response: As mentioned at the November 15, 2012, public meeting at Akwesasne, EPA initiated talks with Alcoa regarding the Superfund Job Training Initiative (Superfund JTI) program for the Grasse River site area. For more information on Superfund JTI, see <http://www.epa.gov/superfund/community/sfjti>.

EPA encourages the leadership of the SRMT and Alcoa to have dialogue regarding this matter.

Comment #40: A commenter suggested that PCBs will seep through the armored cap, or that water or ice will move the cap and that dredging will expose PCBs and cause them to move downstream. The commenter suggested that if the river was diverted the bottom could be cleaned up effectively.

EPA Response: A properly designed and maintained cap can 1) physically isolate the affected sediment from the benthic environment; 2) physically contain the affected sediment in order to prevent resuspension and downstream transport; and 3) reduce the flux of dissolved PCBs into the water column. Any cap (e.g., main channel cap and

armored cap) to be placed within the Site will be designed in accordance with appropriate EPA, U.S. Army Corps of Engineers, and other guidance documents.

A pilot scale application of a main channel cap and armored cap was implemented during the 2005 Remedial Options Pilot Study. Additional capping pilot studies were implemented during the 2001 Capping Pilot Study. Based on the results of these studies as well as EPA experience with caps at other sites, PCBs are not anticipated to “seep through the armored cap, or the water.” Nor is ice expected to move the armored cap. Due to the size of the lower Grasse River, the volume of water that flows through the Site, and the lack of available land through which the river could be diverted, it is not feasible to divert Grasse River water in an attempt to dredge/excavate the contaminated sediment “in the dry.”

Comment #41: The SRMT noted that the lower Grasse River is especially unique due to the relatively frequent occurrence of ice-jam events, its physical setting as a tributary to a major international river, and its importance to the people of Akwesasne. The SRMT feels strongly that given the significant uncertainty associated with the conceptual site model for the river and the limitations associated with installing caps through the water column, very specific language should be placed in the Proposed Plan that recognizes these uncertainties and sets the tone for future re-evaluation of the remedy based upon monitoring results. The SRMT does not believe that the standard CERCLA requirement for reviews at five-year intervals is adequate, that monitoring should be conducted at a much more frequent intervals, that any significant changes in Site conditions be evaluated by the Agencies, and if Site conditions indicate that the basic assumptions made by Alcoa in developing the remedy are flawed to such an extent that long-term performance is in question, the Record of Decision for the Site should be re-opened.

EPA Response: Caps such as the ones to be installed at the Site have been used successfully at other Superfund sites, and EPA expects the armored and main channel caps to effectively sequester contaminated sediments in the lower Grasse River. The selected remedy includes a long-term, post-construction monitoring program that will be developed during design to ensure that the caps remain protective of human health and the environment. It is expected that in addition to monitoring at periodic intervals, monitoring will also be driven by particular events, e.g. a large storm event or severe ice jam events. Such monitoring, in conjunction with the five year reviews required by CERCLA, will enable EPA to identify conditions that may risk the long-term effectiveness of the remedy and to take appropriate steps to correct those conditions should they arise. EPA also notes that the 1989 Administrative Order Index No. II CERCLA-90229, under which Alcoa Inc. would implement the selected remedy, also states that, “In the event that EPA determines that the activities being conducted pursuant to this Order, any other activities being conducted at the Site, or changes in conditions at the Site pose a threat to public health or welfare or the environment, EPA

may direct [Alcoa] Respondent to stop further implementation of actions pursuant to this Order and/or to take other actions reasonably necessary to abate the threat.” The order also requires Alcoa to submit a proposed modification to the remedy for EPA approval if the remedy cannot be operated in a manner that is protective of human health or the environment.

Comment #42: A commenter stated that during a remedial action planning committee meeting in 1989, there was a presentation given in which it was explained that toxic waste sites were categorized from one to five, with five being the lowest risk to human health, and one being the most severe and that it was indicated that the Alcoa site was ranked a very strong number two, with the understanding that a number one designation – received by Love Canal – would not be given again.

EPA Response: Though this comment does not pertain to the Proposed Plan, EPA staff indicated at the public meeting in Massena that it would follow up with a response to this comment.

There are no meeting notes or records from the referenced meeting to verify what was stated. However, because EPA’s hazard ranking system never followed a “Class One to Five” system whereas NYSDEC had employed such a system, EPA believes that the commenter was speaking of the classification system used by NYSDEC in the 1980s. The following classifications would apply to inactive hazardous waste disposal sites in the NYSDEC law:

Class 1 Site: Causing, or presenting an imminent danger of causing, irreversible or irreparable damage to the public health or the environment – immediate action is required.

Class 2 Site: Significant threat to public health or the environment. Action is required.

Class 3 Site: Does not present a significant threat to the environment or public health – Action may be deferred.

Class 4 Site: Site properly closed - requires continued management.

Class 5 Site: Site properly closed - does not require continued management.

The Alcoa Massena-West Facility (upland portion) was determined by the NYSDEC in 1983 to be an inactive Class 2 site. The geographic area which is the subject of this ROD, referred to as the “Alcoa Aggregation” site or “Grasse River” site, would also be a part of the ALCOA site if not addressed under the Unilateral Administrative Order (UAO) issued by USEPA in 1989. As a result, the geographic area addressed by this ROD is listed on the Registry of Inactive Hazardous Waste Sites in New York (Registry) as part of site ID# 645015, “St. Lawrence – Grasse River Massena Area Site”. Had USEPA not

issued the 1989 UAO, then the geographic area addressed by this ROD could have been addressed under State authority. The current classification of the St. Lawrence-Grasse River Massena Area Site in the Registry is Class 2.

Comment #43: A commenter asked if the landfills at the Reynolds site have a lining and if they have a clay lining, does the clay break down after a while?

EPA Response: Though this question does not pertain to the Proposed Plan, EPA staff indicated at the public meeting in Akwesasne that it would follow-up with a response.

The Reynolds Metals Company Site (now the Alcoa Massena-East Facility) is also located in Massena. The 1,600-acre facility is bordered on the north by the St. Lawrence River and on the south by the Raquette River. The land-based remedial actions were performed by Reynolds Metals Co. under an NYSDEC consent order. The contaminated sediments in the St. Lawrence River that were associated with this site were addressed through a 1989 EPA Administrative Order.

The Alcoa Massena East Plant has two landfills as identified in the NYSDEC 1992 Record of Decision, the Industrial Landfill and the Black Mud Pond. As of November 2002, the Industrial Landfill was closed and remediation of all land-based areas of concern had been completed.

The Industrial Landfill was a 11.5 acre area used to receive general and industrial waste, construction debris, spent pot liner, and sewage sludge, along with soil containing PCBs at levels greater than 50 mg/kg. The landfill cap consists of a geosynthetic clay liner and a 40 millimeter (mil) low density polyethylene liner. The liners are keyed into the low permeability substrate base of the landfill. The Industrial Landfill does not have a bottom liner instead the substrate is a combination of clay and glacial till. In addition, there is a leachate collection system that captures contaminated water on the downgradient southern perimeter. This water is ultimately treated and discharged in accordance with a Massena East NYSDEC SPDES permit. The landfill design and closure were completed under the direction and approval of NYSDEC Region 6.

The Black Mud Pond was a six-acre pond used to settle carbon fines resulting from the recycling of spent pot liner. The Black Mud Pond was solidified and capped with a geosynthetic clay liner and 40 mil low density polyethylene membrane. The capped Black Mud Pond also does not have a bottom liner but it is located on low permeability glacial till. Leachate is collected via horizontal drains and a collection sump at the base of the landfill. The Black Mud Pond design and closure was also completed under the direction and approval of NYSDEC Region 6.

Clay liners do not break down over time. As noted above, the substrate layer in the Industrial Landfill is a combination of clay and glacial till.

For more information regarding the landfills or any of the land-based remediation at the Alcoa Massena-East Facility, please contact NYSDEC's Division of Environmental Remediation at the Region 6 office in Watertown at (315) 785-2513.

Comment #44: A member of the SRMT stated that an environmental justice community such as Akwesasne is entitled to a complete, permanent remedy, as CERCLA requires, protecting against future unforeseen events that could expose biota to PCBs, and therefore, the hazardous waste must be removed from the Grasse River if environmental justice is to be achieved.

EPA Response: In accordance with EPA's current Environmental Justice policy, as discussed in Plan EJ 2014, Region 2 has identified Akwesasne, the territory of the SRMT, as a Community with Environmental Justice Concerns. Members of the SRMT, which is a low-income minority community, have been burdened by the environmental and health impacts of pollution in the local river systems, including the Grasse River, due primarily to the consumption of local fish contaminated with PCBs. EPA investigations revealed that culturally the Akwesasne is a subsistence fishing/high fish consumption community. The potential for adverse health impacts from consumption of fish contaminated with PCBs is well documented.

EPA established a remedial goal of 0.01 mg/kg PCBs in fish for protection of the Mohawk subsistence angler in recognition of the unique cultural reliance on fish consumption by members of the Mohawk community. Given the likelihood that significant PCB mass will need to be capped even if the main channel of the river is dredged, however, and the fact that the armored cap will be designed to effectively withstand ice scour, EPA does not believe that the addition of main channel dredging would provide more protection than the selected remedy. Dredging of the main channel would take longer than the time needed to implement the selected remedy, which will delay the time to achieve the interim PCB target levels in fish due to the longer construction duration and greater mass of PCBs that would be resuspended as a result of the main channel dredging. In addition, EPA expects main channel dredging to expose deeper, more highly contaminated sediments that cannot be effectively removed due to conditions on the river bottom materials such as bedrock, glacial till, and/or marine clay, which prevent overdredging. By removing less highly contaminated sediments that cover the deeper, more contaminated materials, main channel dredging may actually increase the risk of highly contaminated sediments being released into the environment in the unlikely event that a portion of the cap fails.

Comment #45: The Mohawk Nation Council of Chiefs commented that it expects the federal government to honor its trust obligations and treaty commitments with the Mohawks and require Alcoa to remove all contaminants and restore the Grasse River to its pristine condition that existed prior to the contamination.

EPA Response: The United States maintains that land reserved to the SRMT by the 1796 Treaty includes the Indian Meadows, which include land along the banks of the Grasse River as well as land located along the St. Lawrence River downstream of the Site and EPA, of course, subscribes to the United States' position regarding the Indian Meadows. EPA notes, however, that the lands reserved by the 1796 Treaty are currently in dispute. *Canadian St. Regis Band of Mohawk Indians v. State of New York, et al.*, 5:82-cv-783 (N.D.N.Y.). Fishing, hunting, harvesting, and spiritual ceremonies are among the activities that have been historically and are now conducted by the SRMT in the lower Grasse River and the Indian Meadows. The lower Grasse River and the Indian Meadows are of cultural significance to the SRMT.

In recognition of the unique cultural reliance on fish consumption by members of the Mohawk community, EPA established a remedial goal of 0.01 mg/kg PCBs in fish for protection of the Mohawk subsistence angler. While EPA understands the SRMT's strong desire to have all contamination removed from the Site, EPA does not believe that it is technically possible to do so. As discussed in the EPA response to Comment #8, even Alternative 10, the most aggressive dredging remedy evaluated for the Site, is not anticipated to return the lower Grasse River to a pristine condition. Alcoa's analysis conducted at the request of EPA concluded that it is technically impracticable to achieve the SRMT's sediment cleanup level of 0.1 mg/kg. The Superfund law requires CERCLA remedies to be protective of human health and the environment, but does not require a CERCLA cleanup to return a site to a pristine, contaminant-free condition. The selected remedy is projected to achieve the interim target levels (0.26 mg/kg and 0.36 mg/kg) for PCBs in fish more quickly than any of the remedial alternatives that include main channel dredging. While neither the 0.01 mg/kg remedial goal for Mohawk health nor the 0.05 mg/kg remedial goal for the general population are projected to be achieved within the modeled 30-year time frame, reduction of PCB levels in fish to below the interim target levels may allow for the fish consumption advisories to be modified, and would reduce the risks to anglers who do not follow the consumption advisories.

Alternative 10 would generate over 1.5 million cy of sediment that would need to be transported and disposed of off-site, and would have a significantly longer duration of short-term impacts (18 years vs. 6 years) than the selected remedy. At this Site, the mass removal from the main channel does not provide any increased human health or ecological risk reduction and, as discussed in the EPA response to comment #6, may actually increase the risk of highly contaminated sediments becoming released into the environment in the unlikely event that a portion of the cap fails. An armored cap would be required even under Alternative 10, because site-specific bottom conditions - where the most highly contaminated sediment is present over bottom materials that prevent overdredging such as bedrock, glacial till, and/or marine clay - would prevent removal of all PCB contamination from the main channel.

Comment #46: Some members of the Akwesasne stated: A permanent remedy should restore all Mohawk uses of the Grasse River. The Mohawk relationship to the River has been severed by the contamination. The physical activities of fishing, hunting, trapping, picking sweet

grass, and harvesting medicine are knowledge that is precious. If the Mohawks cannot perform these activities, they will not be passed down to the next generations. As a people, the Mohawks are strongly tied to the River and it is our responsibility to ensure that this relationship is renewed and the Site is cleaned up fully.

EPA Response: EPA acknowledges that the lower Grasse River and the Indian Meadows are of cultural significance to the SRMT, and that fishing, hunting, harvesting, and spiritual ceremonies are among the activities that have been historically and are now conducted by the SRMT in the lower Grasse River and the Indian Meadows. Exposure to PCBs through consumption of contaminated fish at the Site poses an unacceptably high risk to Mohawk health. The selected remedy will reduce exposure to PCBs through consumption of contaminated fish and is therefore protective of Mohawk health.

Comment #47: The Trustees requested that EPA coordinate with them on a baseline habitat conditions and other natural resource and habitat reconstruction approaches as the remedy is designed and implemented.

EPA Response: EPA will communicate and coordinate with the Trustees, as appropriate, on baseline habitat conditions and habitat reconstruction approaches.

Comment #48: The SRMT requested that the SRMT's promulgated standards for PCBs in sediment (0.1 part per million or 0.1 mg/kg) and surface water (1 part per trillion, or 1 ng/L) should be applied as Applicable or Relevant and Appropriate Requirements for the Grasse River cleanup. (Tribal Council Resolution No. 89-19 and Tribal Council Resolution No. 2007-72.)

EPA Response: EPA believes, as a matter of policy, that it is appropriate to treat Indian tribes in the same manner as states for the purpose of identifying ARARs under CERCLA. See Preamble to the NCP, 55 Fed. Reg. 8666, 8741 (March 8, 1990). Tribal requirements that meet the eligibility criteria for State ARARs, i.e., those that are promulgated (legally enforceable and of general applicability), are more stringent than federal requirements, and are identified in a timely manner, are potential ARARs.

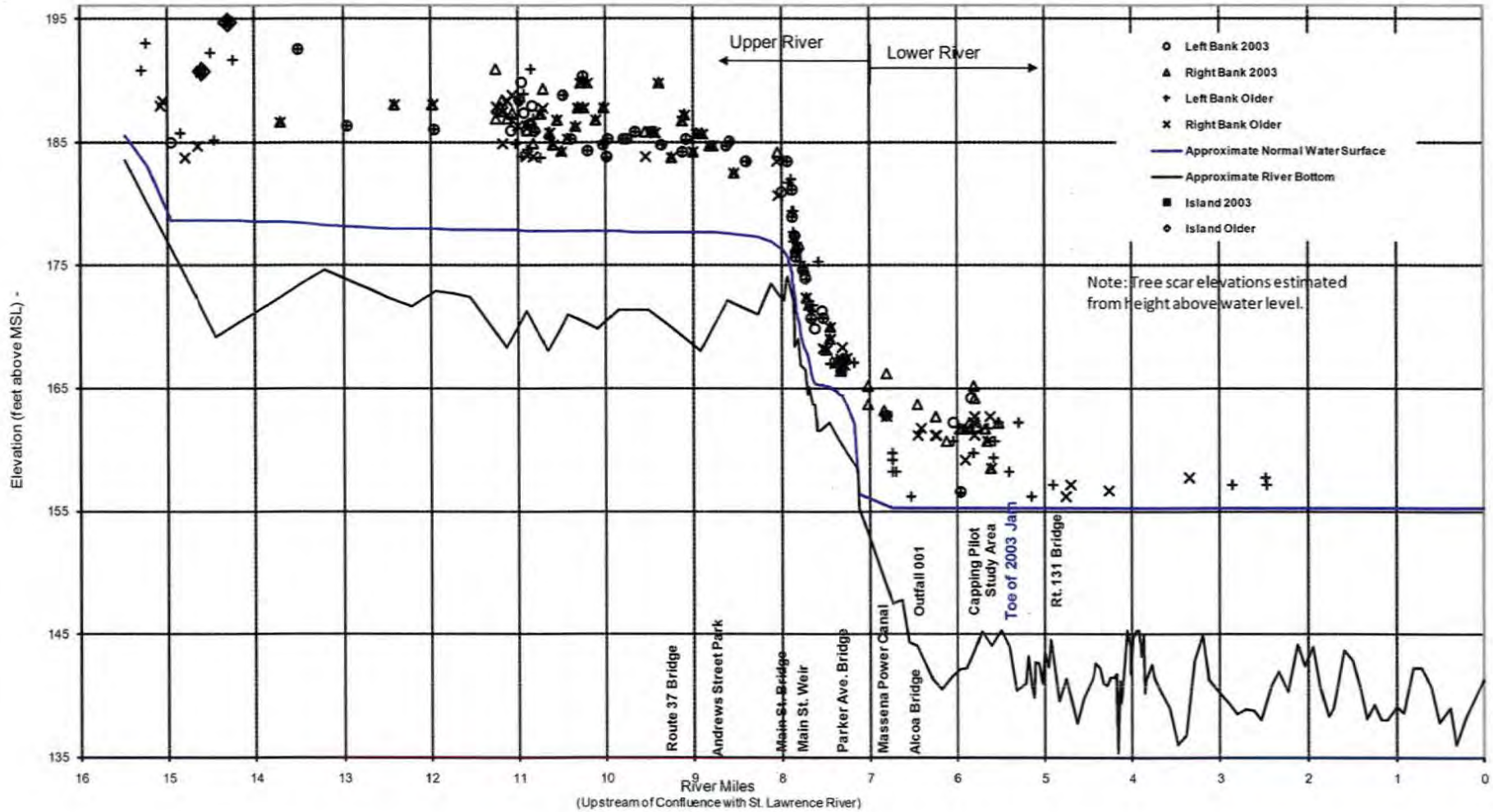
As noted in the ROD, EPA and the SRMT have extensively discussed, on a government-to-government basis, whether to apply the SRMT's sediment cleanup standard for PCBs (0.1 mg/kg) as "applicable or relevant and appropriate" or "to be considered" for the cleanup. The United States maintains that land reserved to the SRMT by the 1796 Treaty includes the Indian Meadows along the banks of the lower Grasse River, and EPA, of course, subscribes to the United States' position regarding the Indian Meadows. The status of the lands reserved by the 1796 Treaty is currently in dispute. See *Canadian St. Regis Band of Mohawk Indians v. State of New York*, et al., 5:82-cv-783 (N.D.N.Y.).

EPA and the SRMT engaged in consultations regarding the application of SRMT standards to the Grasse River cleanup, and EPA very carefully considered the matters discussed during the consultation process. During that process, EPA and the SRMT discussed a number of complex issues, including numerous issues relating to whether the SRMT sediment standard is technically feasible and well-suited to the remedy, and necessary to effectively address the risks at the Site.

As indicated in the ROD, EPA evaluated the SRMT sediment standard as a “to-be-considered” (TBC) requirement for the Grasse River cleanup. The SRMT sediment standard was considered when EPA established a remediation goal for PCBs in fish that is protective of Mohawk health, although it is not being adopted as the cleanup standard for the sediment. EPA’s decision to evaluate the SRMT standard as a TBC was solely for purposes of developing the remedy, and was unrelated to the status of the SRMT’s land claim. EPA notes that the SRMT cleanup standard is significantly lower than EPA’s action levels for sediment cleanup (i.e., ≥ 1 mg/kg PCB surface or segment length-weighted average concentration) in the ROD, and analyses performed by Alcoa for the AofA at EPA’s request and included in the administrative record concluded that it is not technically practicable to achieve the SRMT’s sediment cleanup level of 0.1 mg/kg. As EPA also explained during the consultation process, the SRMT’s standard of 1 ng/L, for PCBs in surface water would not qualify as an ARAR under CERCLA because it is not more stringent than the 1 ng/L federal Clean Water Act ambient water quality criterion for navigable waters, which is an ARAR for the cleanup. Because the federal water quality criterion is an ARAR, however, the remedy must achieve a PCB concentration in water that is equivalent to the SRMT water quality standard.

Figures for Appendix II

Figures 4-17 and 4-18 from *CCLGR Addendum*, 2009
Figures 3-4 through 3-6 from *CCLGR Addendum*, 2009
Figures 4-6 through 4-16 from *CCLGR Addendum*, 2009
Figure A-12 from Appendix A Environmental Monitoring Programs and Results in *Remedial Options Pilot Study Documentation Report*, 2006
Figure 2-22 from *Remedial Options Pilot Study Documentation Report*, 2006
Figures 2.10 through 2.15 from Appendix Q Numerical Modeling of Ice Breakup in *CCLGR Addendum*, 2009
Figures 2.17 through 2.21 from Appendix Q Numerical Modeling of Ice Breakup in *CCLGR Addendum*, 2009
Figures 3.30 and 3.31 from Appendix Q Numerical Modeling of Ice Breakup in *CCLGR Addendum*, 2009
Figure 3.32 from Appendix Q Numerical Modeling of Ice Breakup in *CCLGR Addendum*, 2009
Figure 4-2 from *St. Lawrence River Remediation Project Documentation Report*, 2009



NOT TO SCALE

MAXIMUM TREE SCAR HEIGHTS
 GRASSE RIVER TREE SCAR SURVEY

FIGURE 4-17

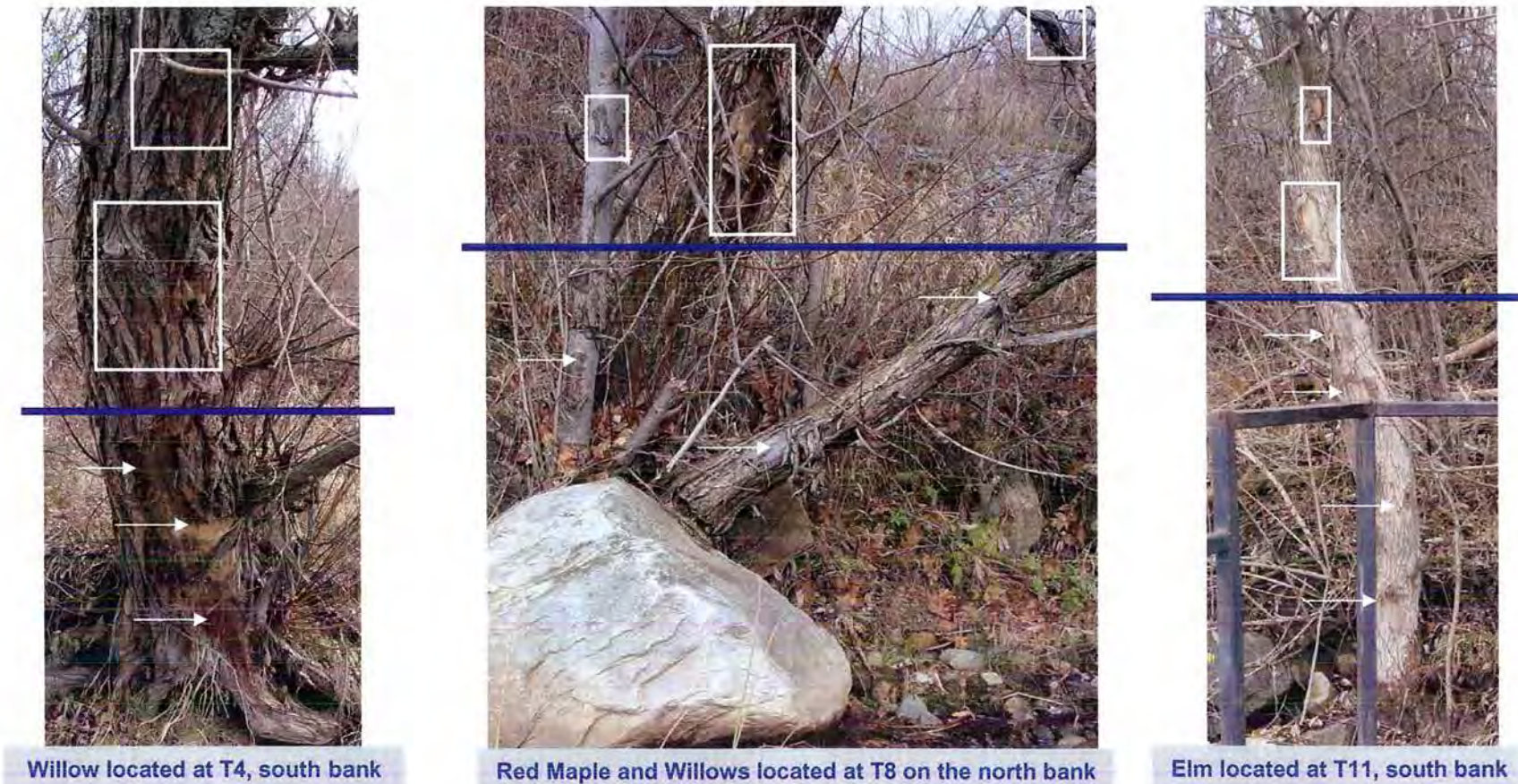
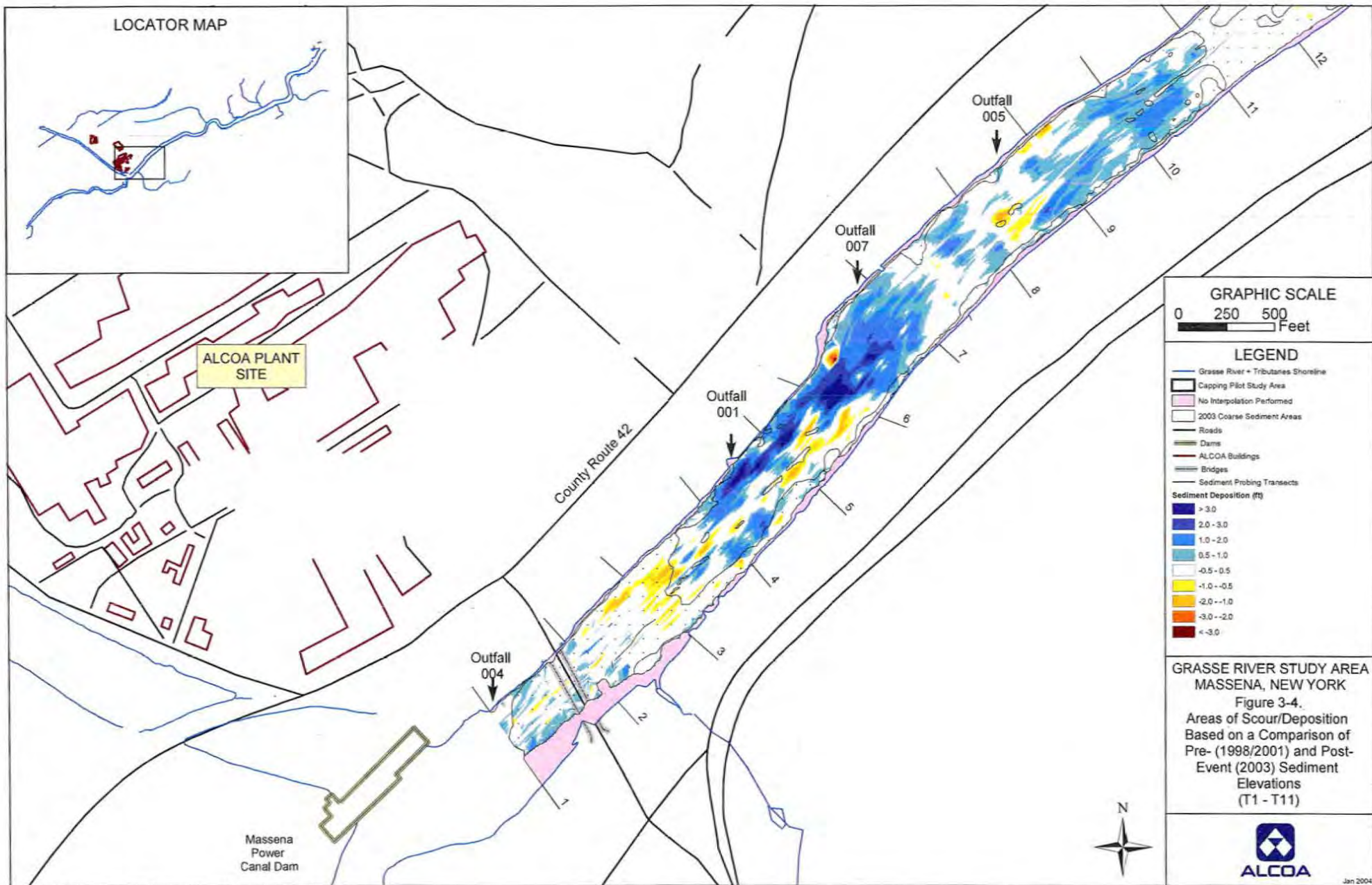


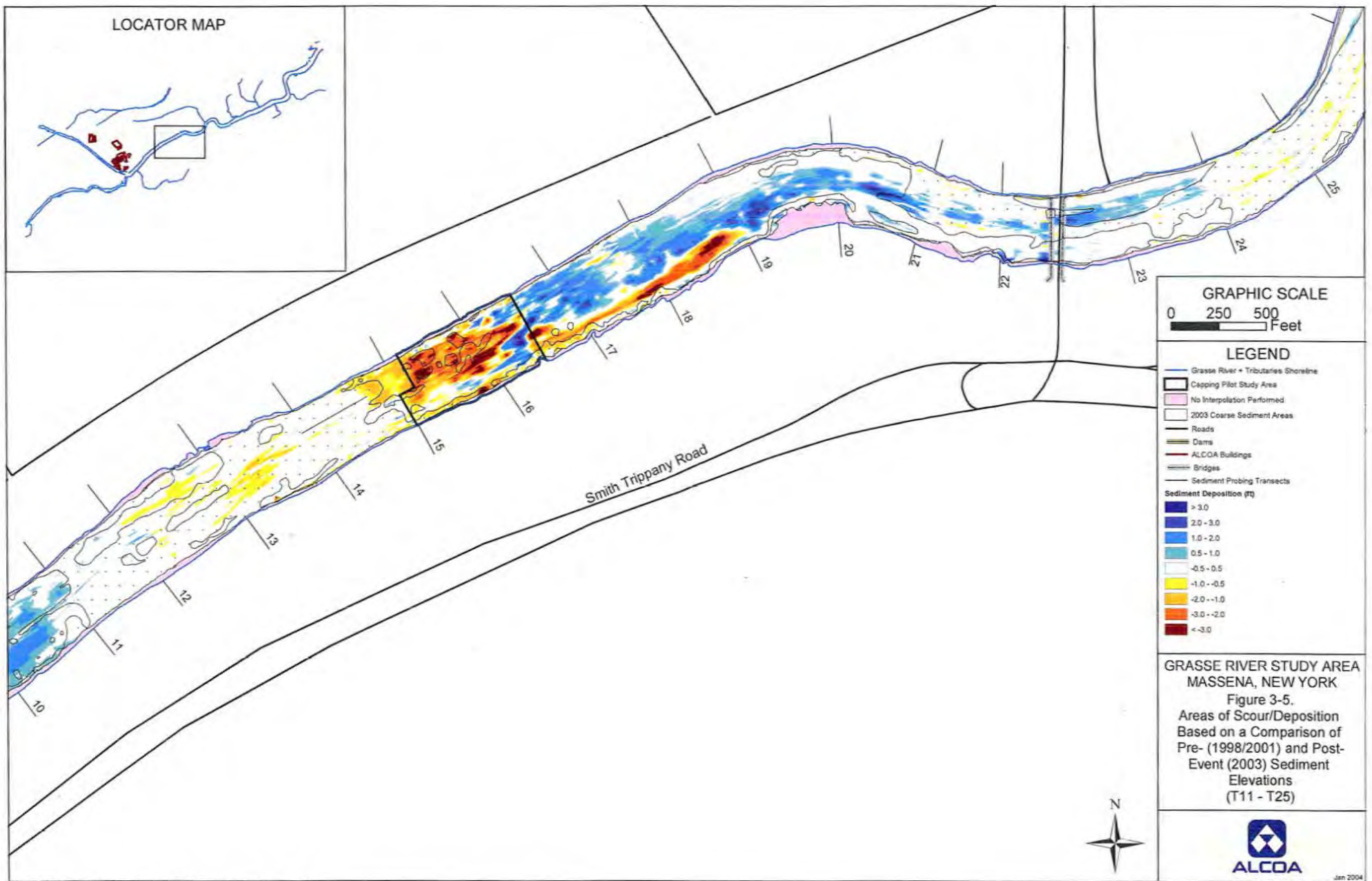
Figure 4-18. Comparison of Heights of Tree Scars from the 2003 Event and Older Events

Boxes represent height of 2003 tree scars.

Arrows represent older tree scars.

Blue line represents maximum height of historic tree scars.





LOCATOR MAP

GRAPHIC SCALE

0 250 500 Feet

LEGEND

- Grasse River + Tributaries Shoreline
- Capping Pilot Study Area
- No Interpolation Performed
- 2003 Coarse Sediment Areas
- Roads
- Dams
- ALCOA Buildings
- Bridges
- Sediment Probing Transects

Sediment Deposition (ft)

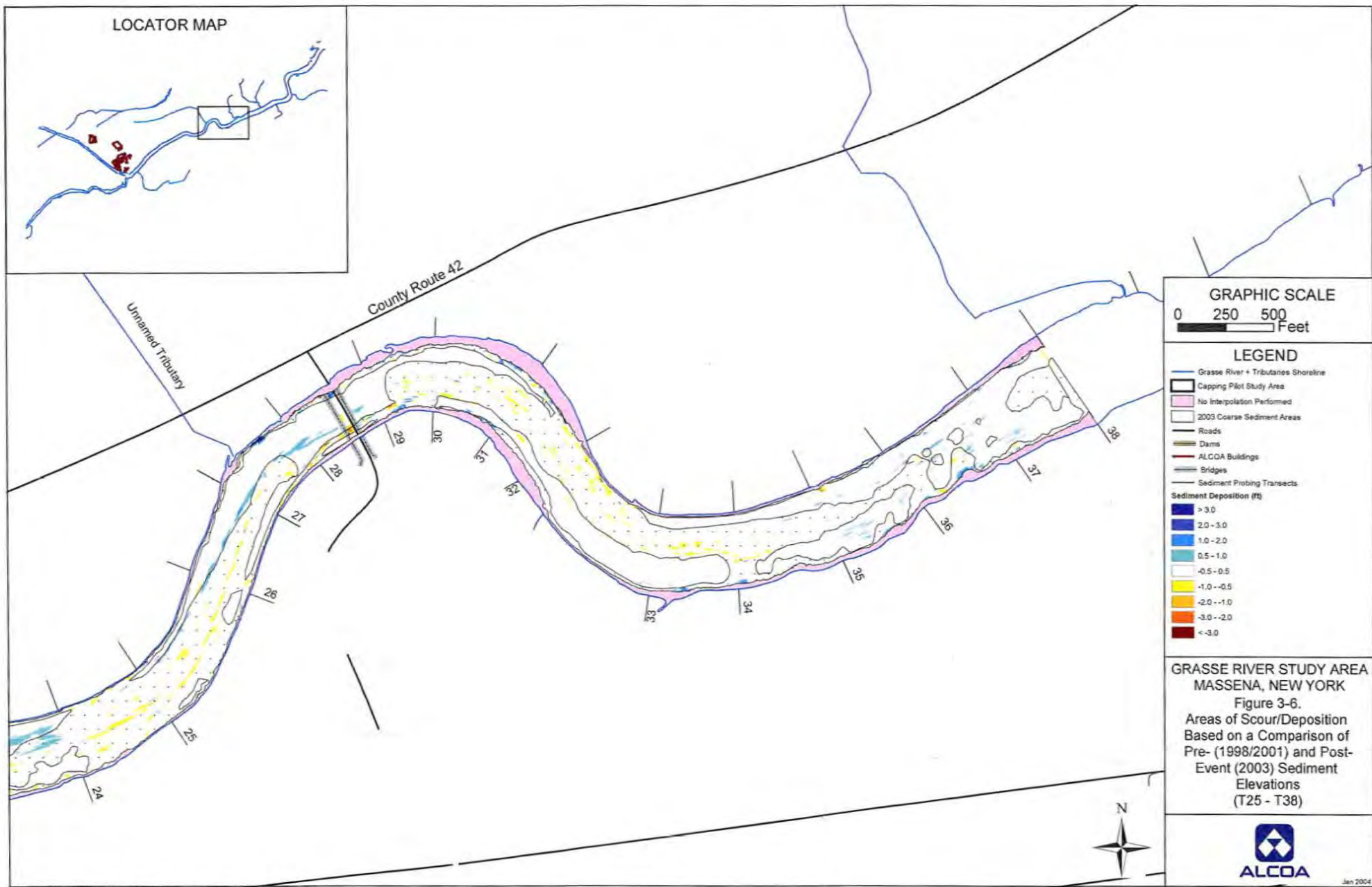
- > 3.0
- 2.0 - 3.0
- 1.0 - 2.0
- 0.5 - 1.0
- 0.5 - 0.5
- 1.0 - -0.5
- 2.0 - -1.0
- 3.0 - -2.0
- < -3.0

GRASSE RIVER STUDY AREA
MASSENA, NEW YORK

Figure 3-5.
Areas of Scour/Deposition
Based on a Comparison of
Pre- (1998/2001) and Post-
Event (2003) Sediment
Elevations
(T11 - T25)



Jan 2004



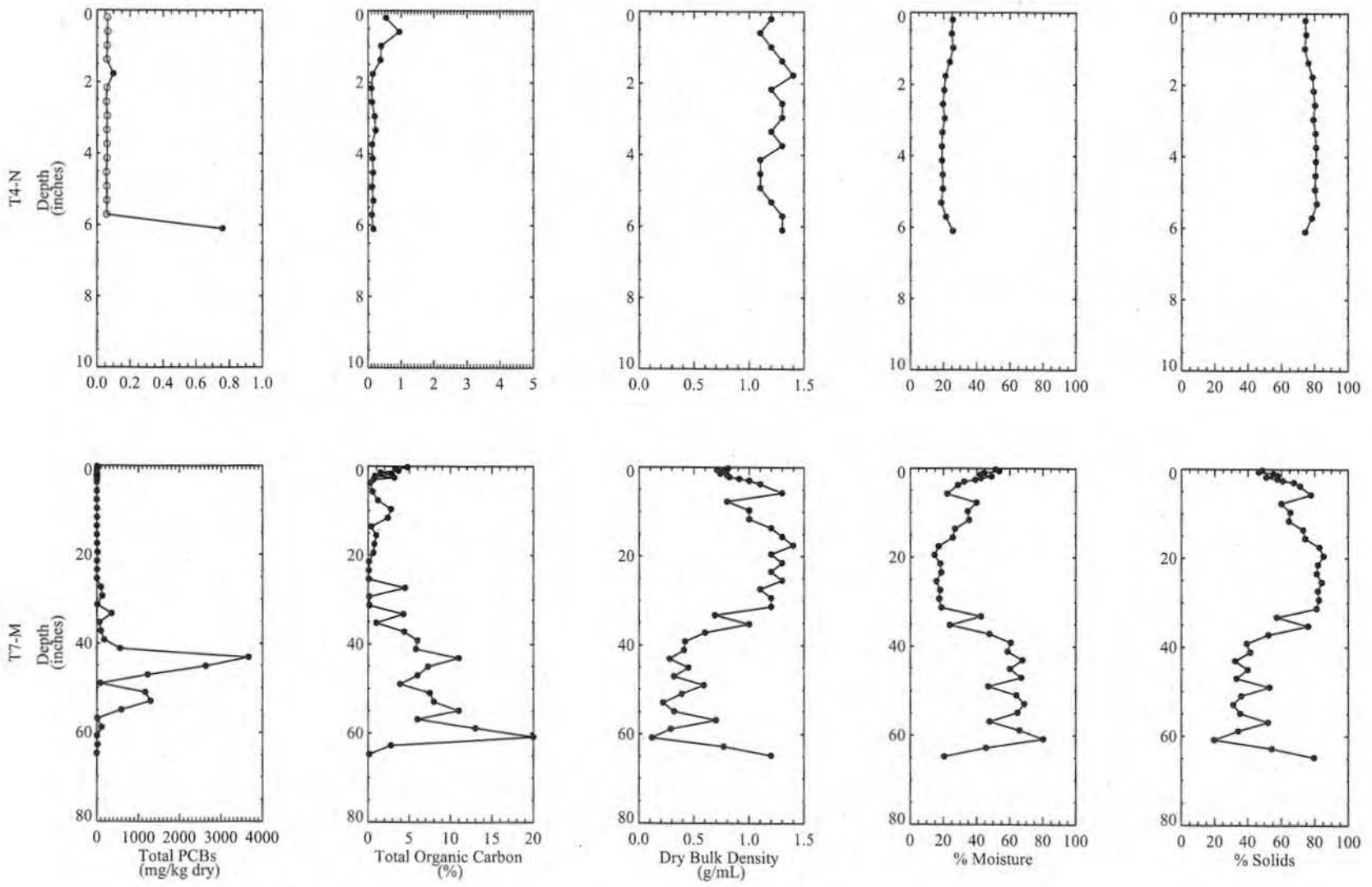


Figure 4-6. Vertical Profiles for High Resolution Cores T4-N and T7-M

2003 Phase II Monitoring Program

Results plotted at mid-depth. Duplicate results averaged. Values below the practical quantitation limit shown as open circles.

Data table: sediment_aro

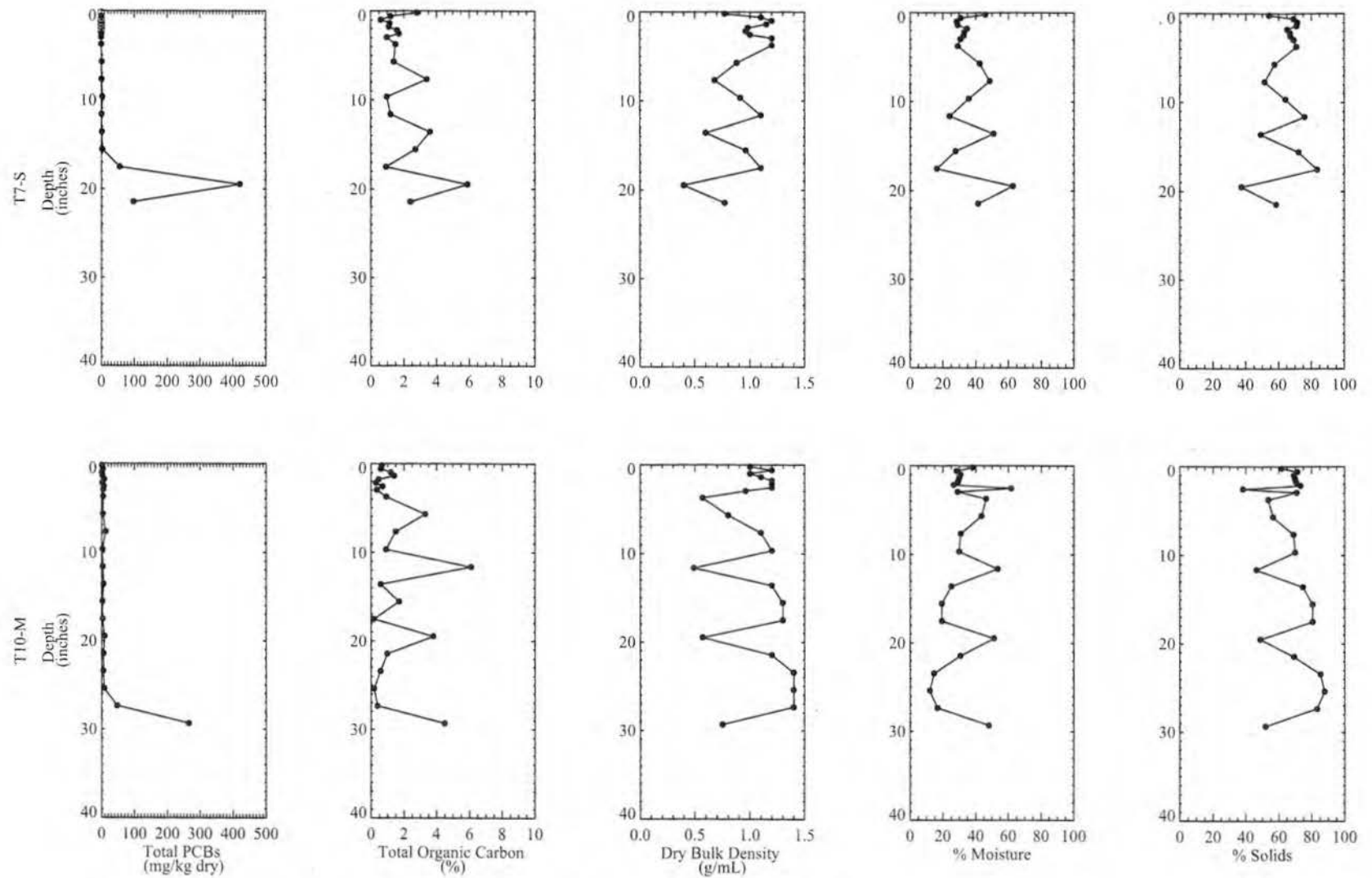


Figure 4-7. Vertical Profiles for High Resolution Cores T7-S and T10-M

2003 Phase II Monitoring Program

Results plotted at mid-depth. Duplicate results averaged. Values below the practical quantitation limit shown as open circles.

If duplicate and sample results are above and below detection limit, average shown as open circle with cross-hair.

Data table: sediment_aro

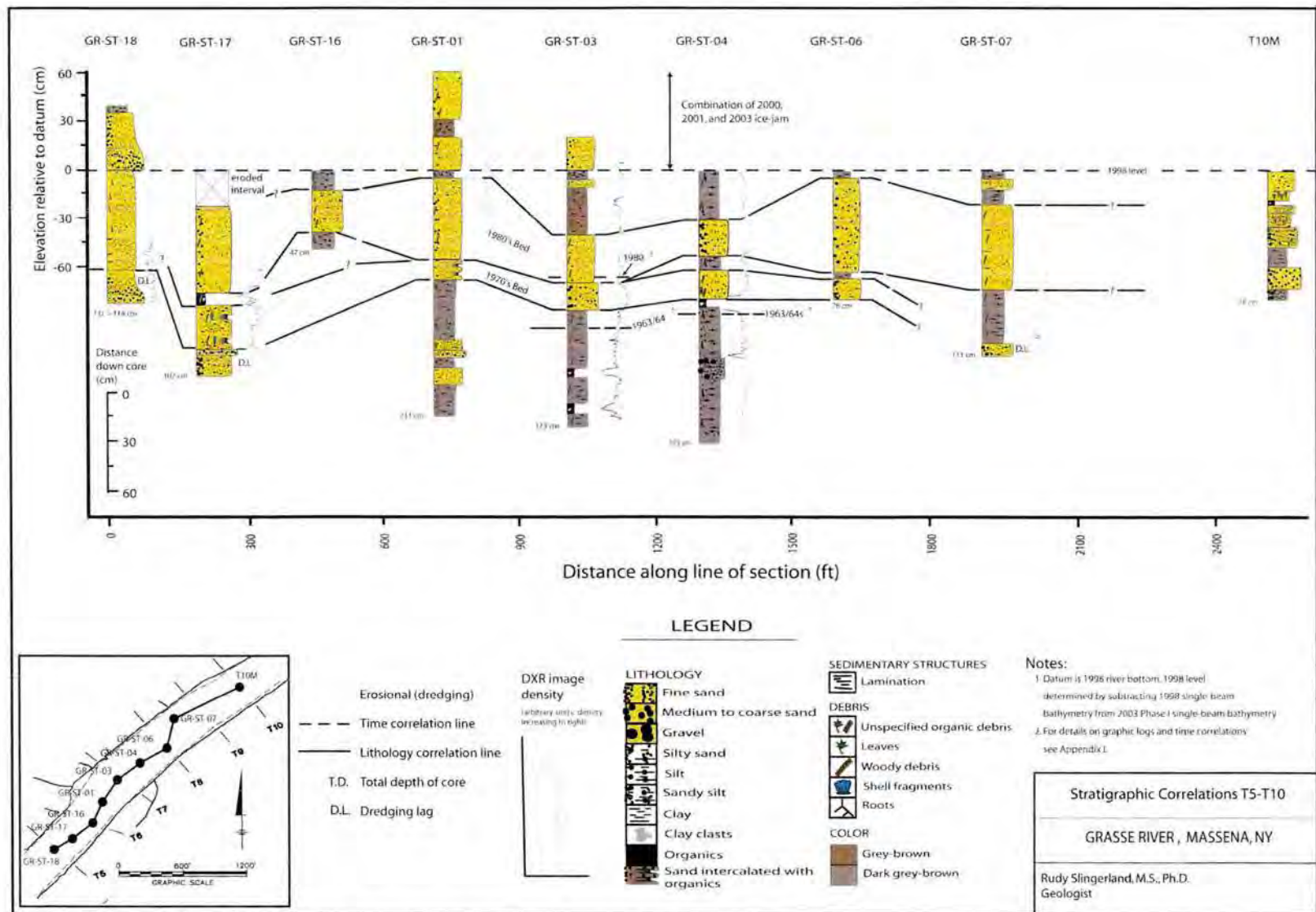


Figure 4-8. Correlation Diagram from Stratigraphic Analysis of Sediment Cores (T5 to T10)

Although all stratigraphic core data were considered, only cores lying along the channel centerline are presented for the purpose of simplification. See **Appendix P** for detailed graphic logs.

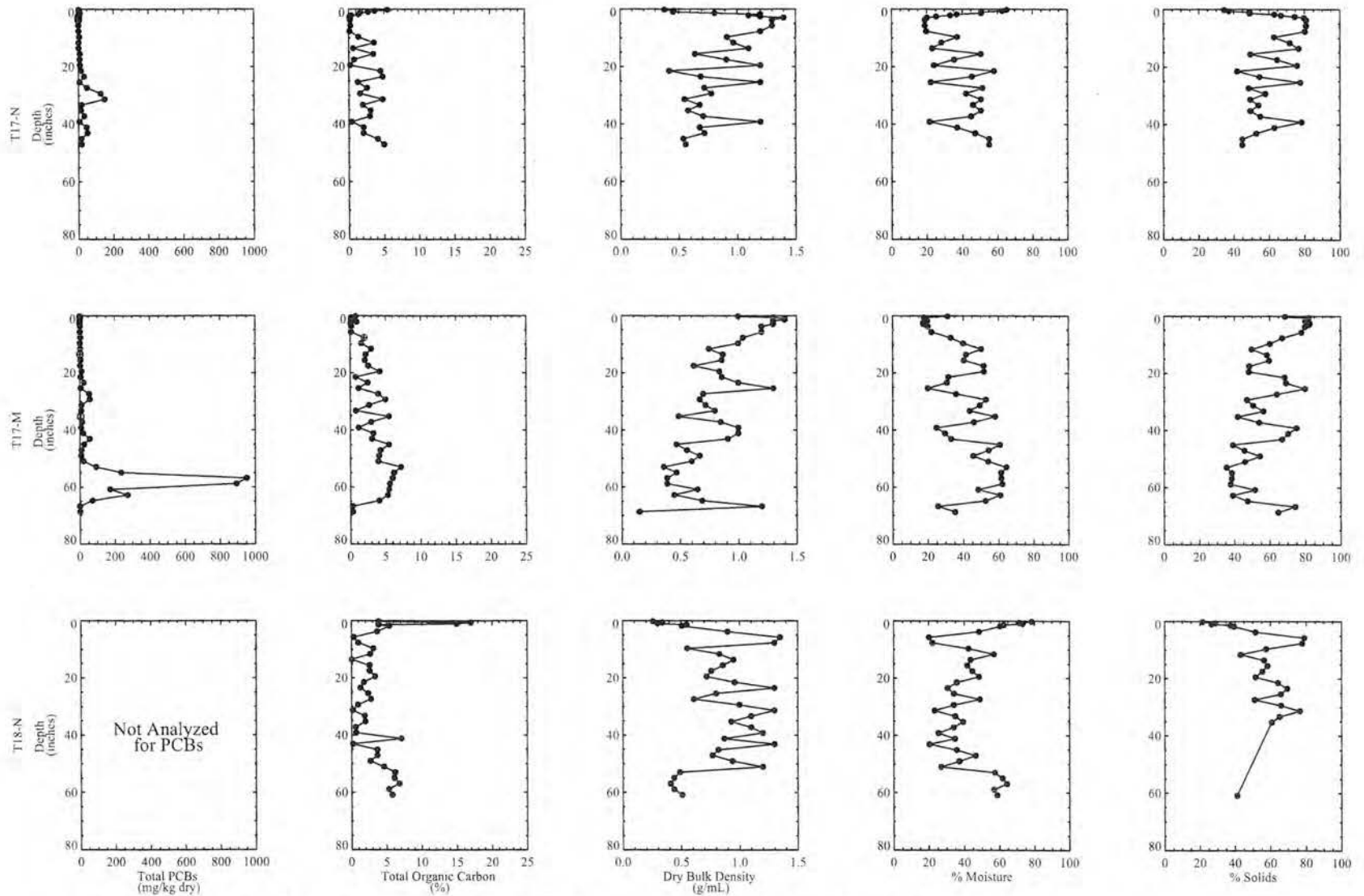


Figure 4-9. Vertical Profiles for High Resolution Cores T17-N, T17-M, and T18-N

2003 Phase 1 Monitoring Program

Results plotted at mid-depth. Duplicate results averaged. Estimated values shown as open circles; values below method detection limit (MDL) shown as open diamonds. If duplicate and sample results are above detection limit and estimated, open circle with cross-hair; if estimated and below MDL, open diamond with cross-hair.

Data table: sediment_bz

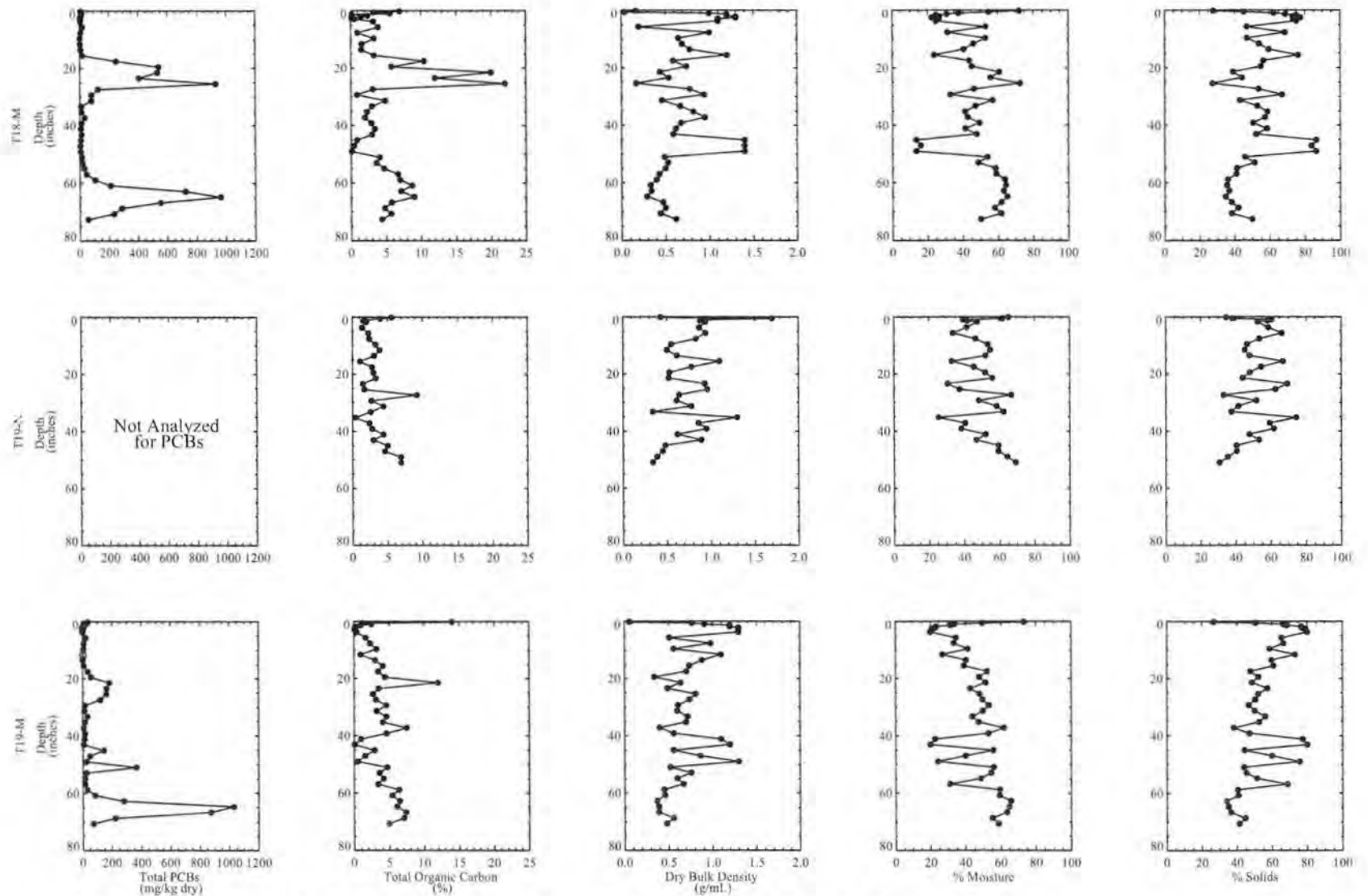


Figure 4-10. Vertical Profiles for High Resolution Cores T18-M, T19-N, and T19-M

2003 Phase I Monitoring Program

Results plotted at mid-depth. Duplicate results averaged. Estimated values shown as open circles; values below method detection limit (MDL) shown as open diamonds. If duplicate and sample results are above detection limit and estimated, open circle with cross-hair; if estimated and below MDL, open diamond with cross-hair.

Data table: sediment_bz

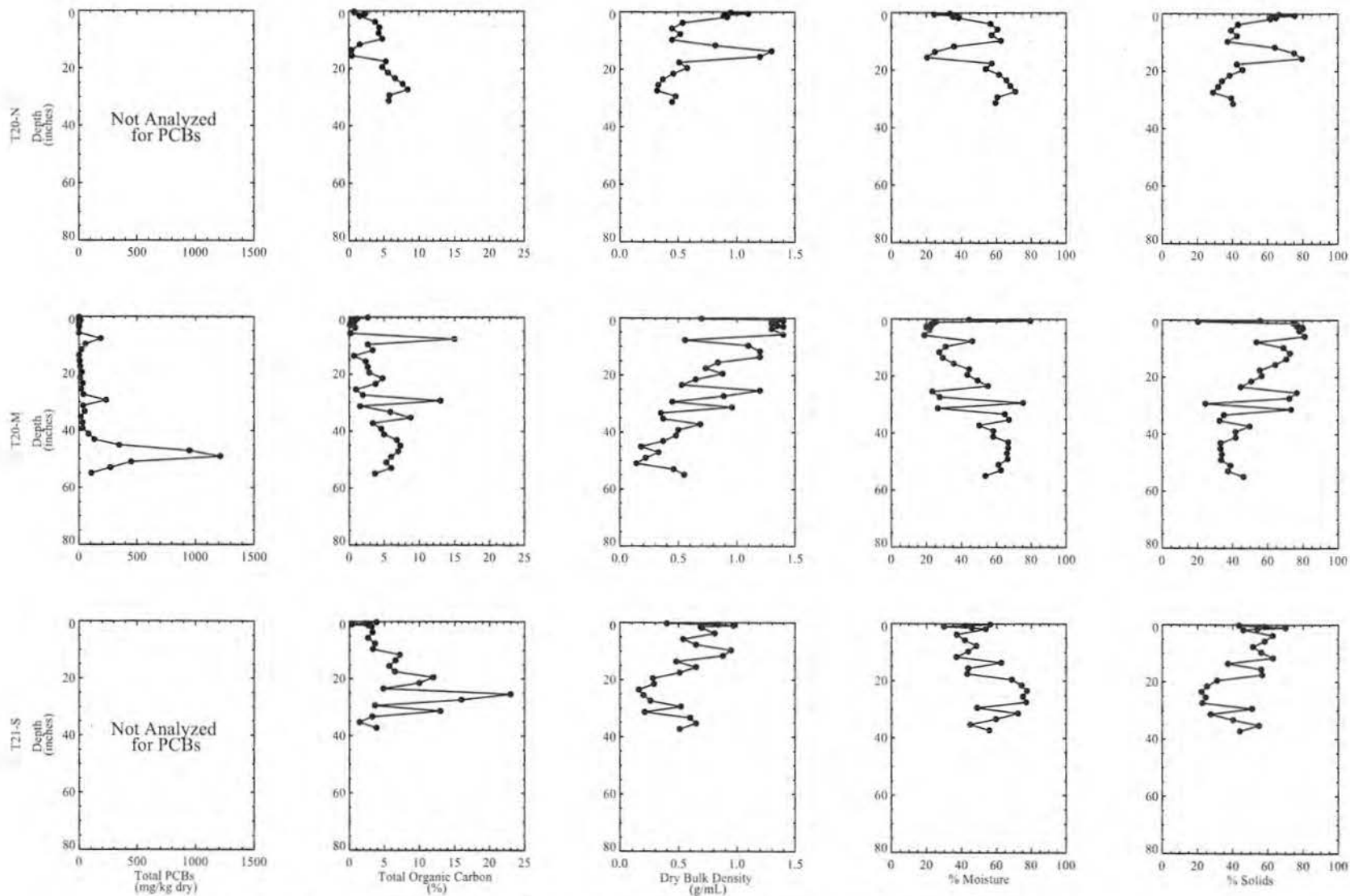
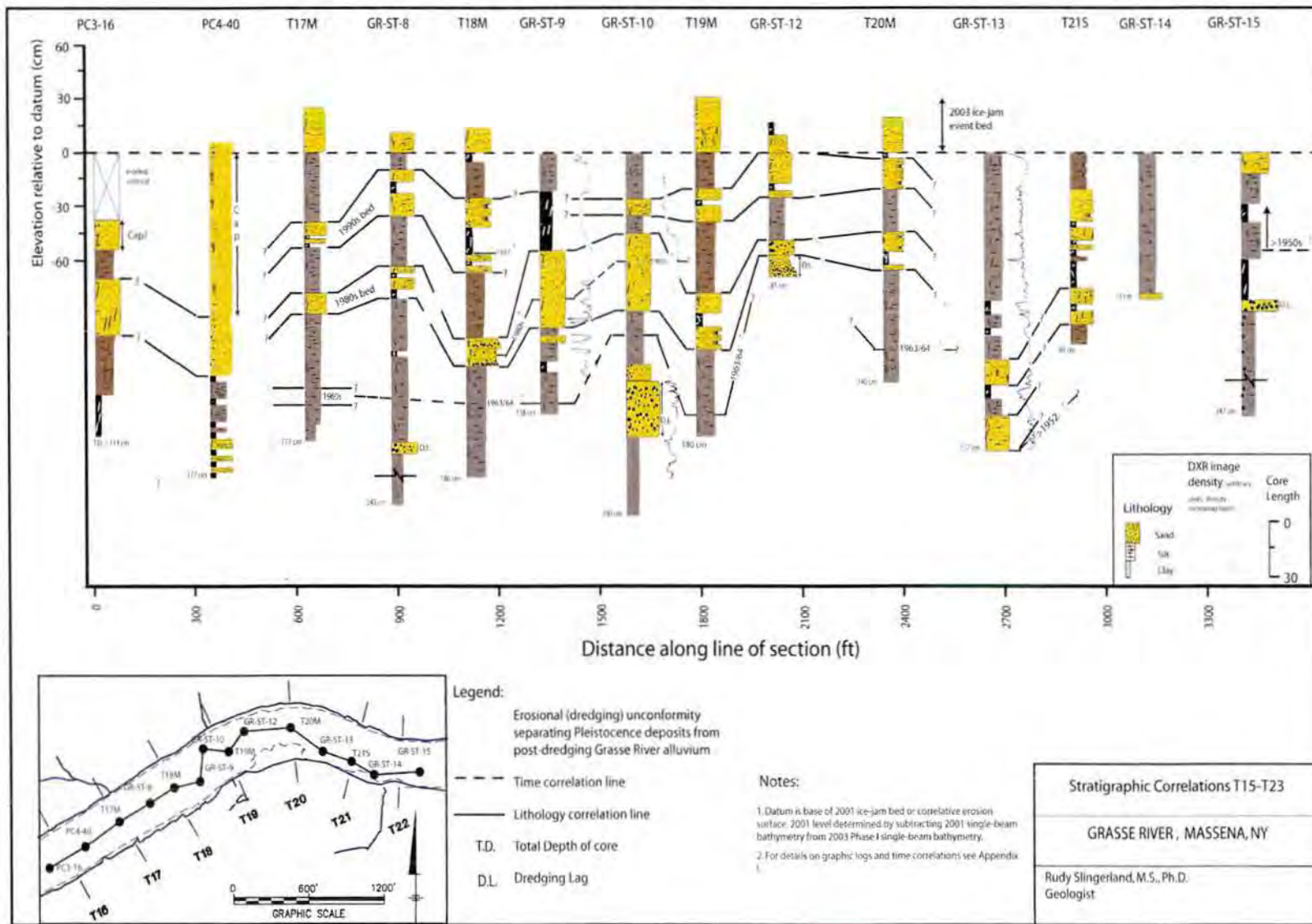


Figure 4-11. Vertical Profiles for High Resolution Cores T20-N, T20-M, and T21-S

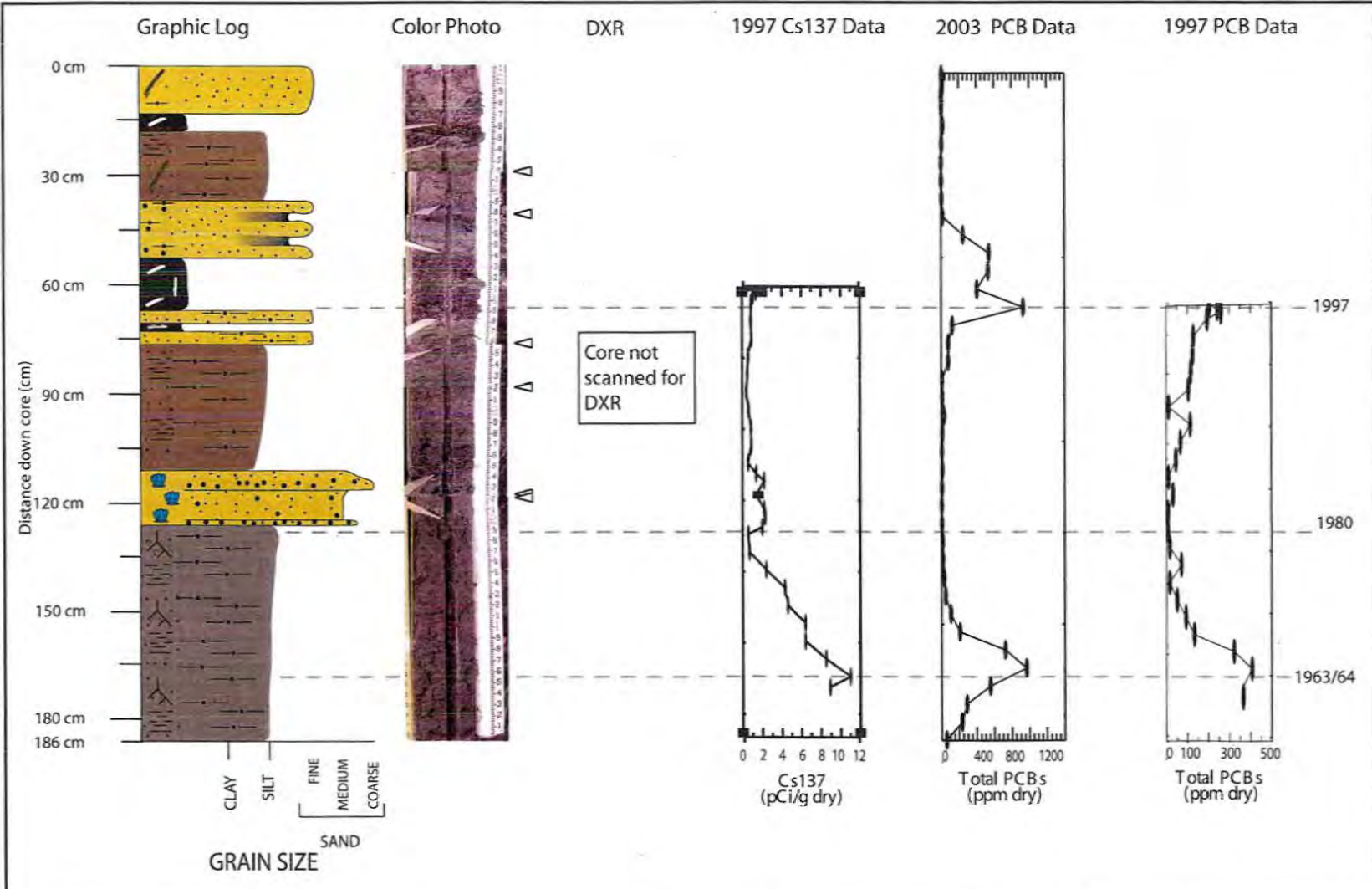
2003 Phase I Monitoring Program

Results plotted at mid-depth. Duplicate results averaged.

Data table: sediment_bz



Although all stratigraphic core data were considered, only cores lying along the channel centerline are presented for the purpose of simplification. See **Appendix P** for detailed graphic logs.

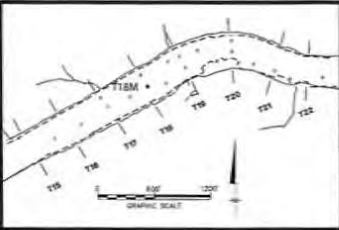


Legend:

- Dredging unconformity (D.U.)
- D.L. Dredging lag
- Time correlation line
- Indicates location where photos are stitched together

Notes:

1. Graphic log interpreted from 2003 Phase I BBL color photos and descriptions (CD NAME: Grasse River Phase I Sediment Sampling Photo Log - June/July 2003).
2. See figure RS-A-1 for detailed graphic log legend.
3. 1997 Cs137 data from core 1997 SRS Sediment Sampling Program (Figure 3-88 CCLGR).
4. 1997 horizon based on matching PCB profiles from 2003 and 1997 at same location.
5. 1997 PCB data from core in same location; part of 1997 SRS Sediment Sampling Program (Figure 3-109 CCLGR).
6. 2003 PCB data from 2003 Phase I Monitoring Program (Data Table: cap_sediment_bz, cap_sediment_grainsize).



CORE: T18M

GRASSE RIVER MASSENA, NY

Rudy Slingerland, M.S., Ph.D.
Geologist

FIGURE 4-13

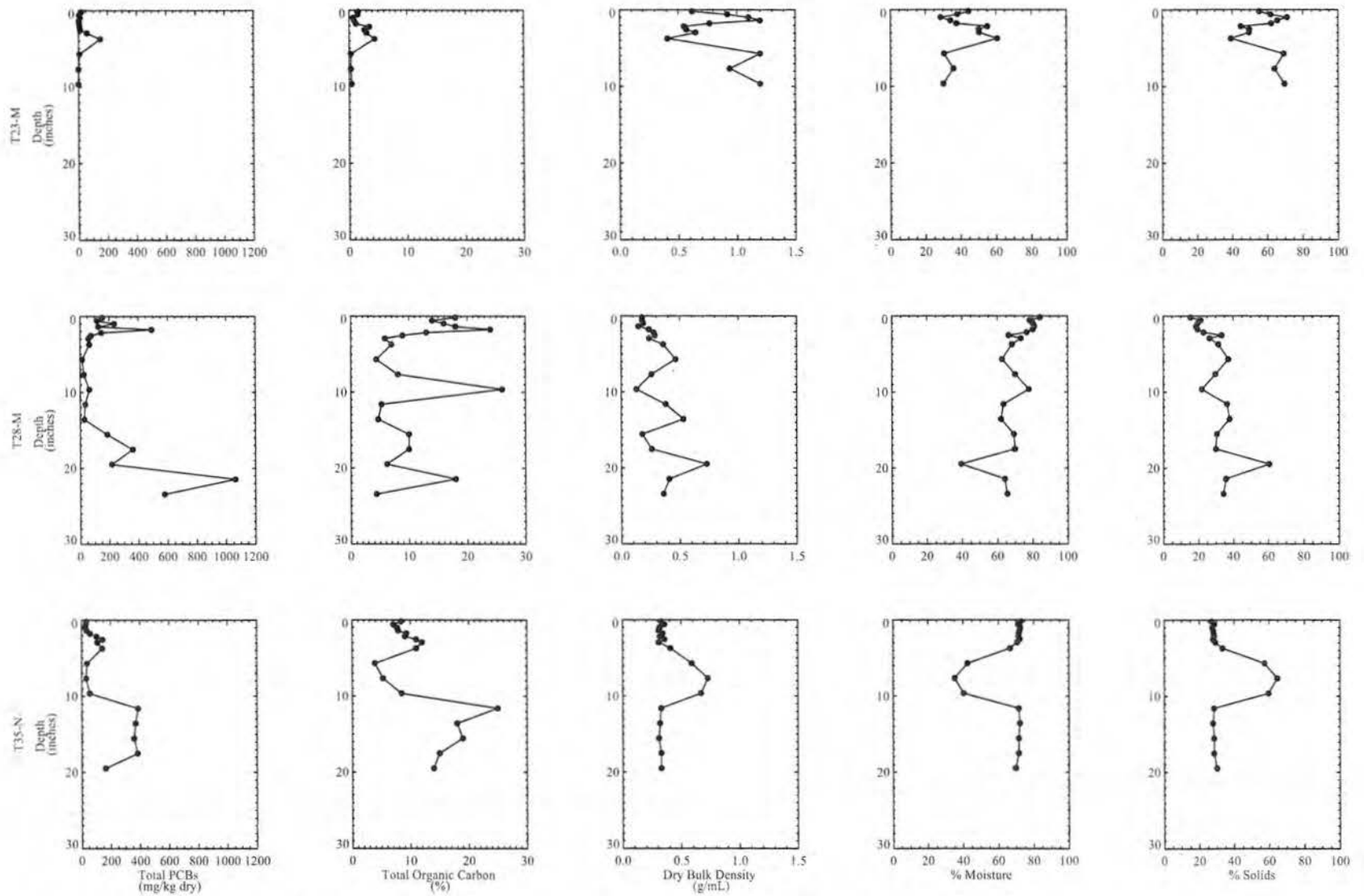


Figure 4-14. Vertical Profiles for High Resolution Cores T23-M, T28-M, and T35-N

2003 Phase II Monitoring Program

Results plotted at mid-depth. Duplicate results averaged.

Data table: sediment_aro

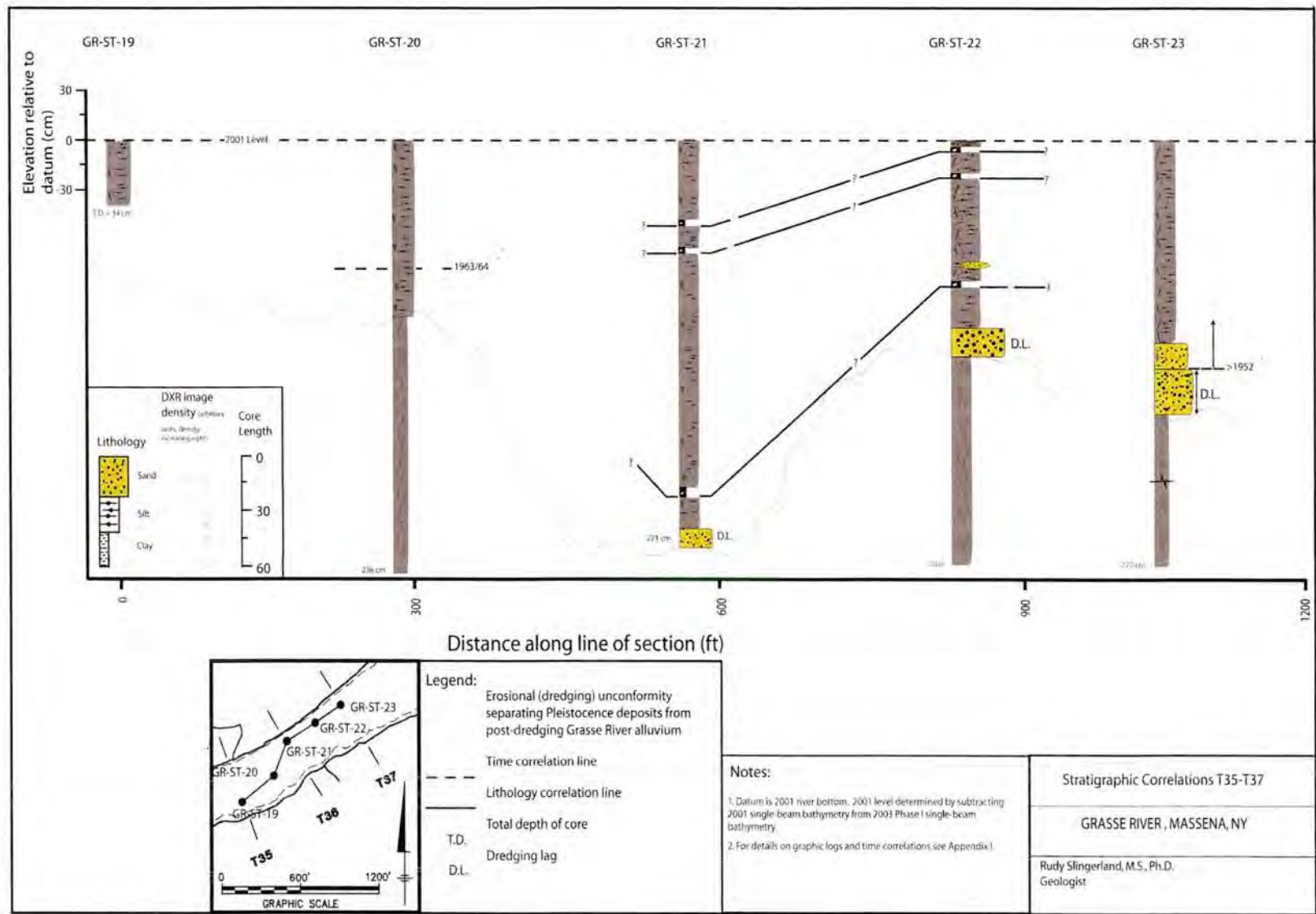


Figure 4-15. Correlation Diagram from Stratigraphic Analysis of Sediment Cores (T35 to T37)

Although all stratigraphic core data were considered, only cores lying along the channel centerline are presented for the purpose of simplification. See **Appendix P** for detailed graphic logs.

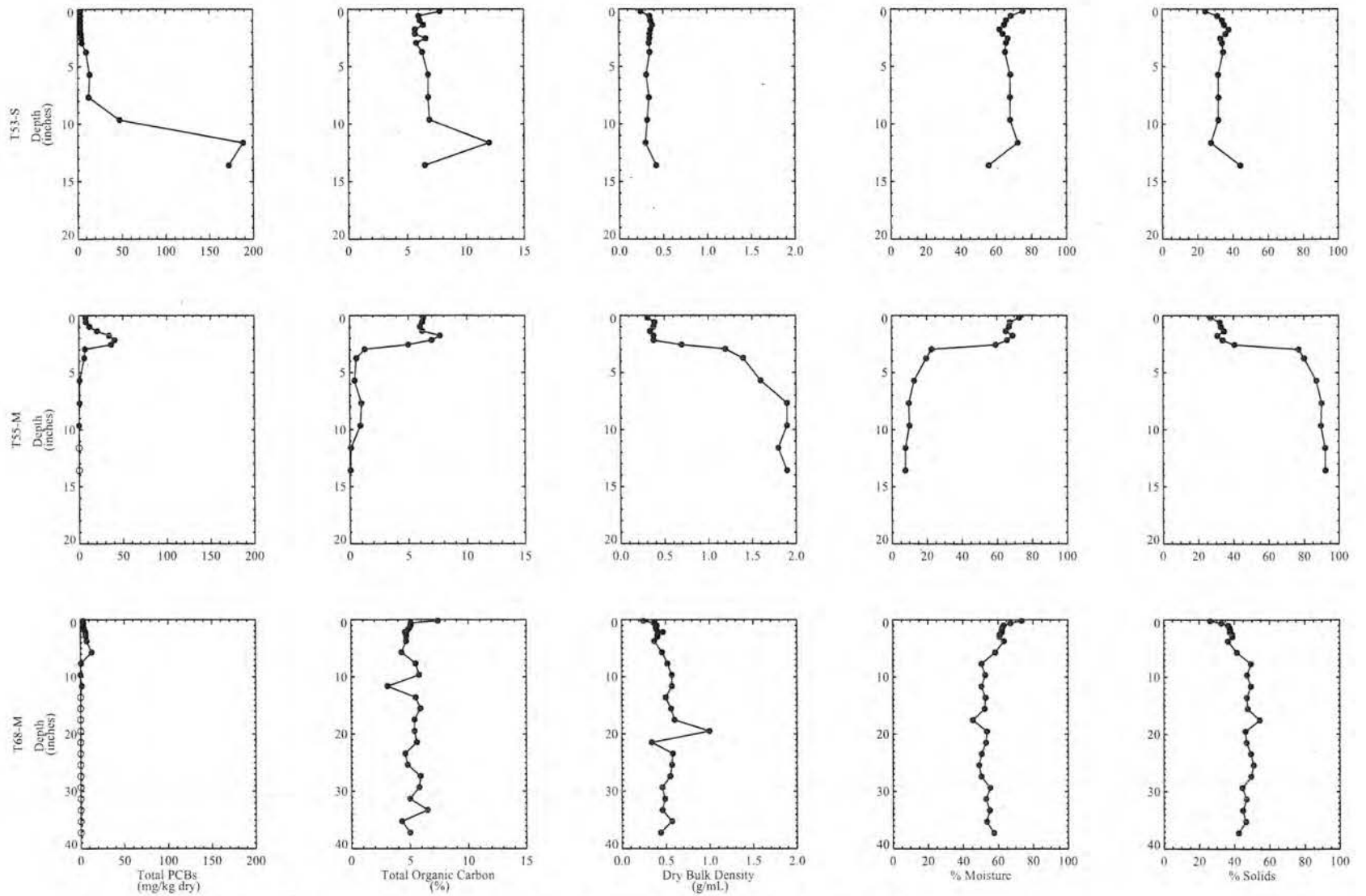
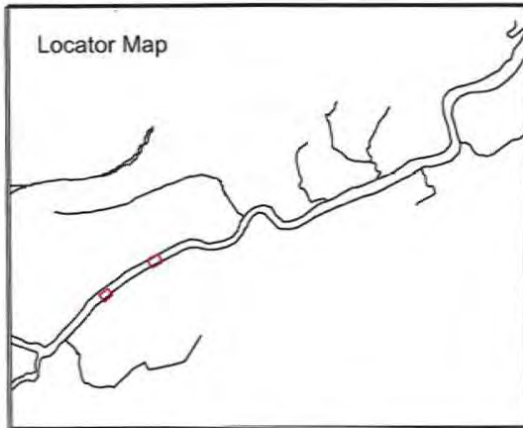


Figure 4-16. Vertical Profiles for High Resolution Cores T53-S, T55-M, and T68-M

2003 Phase II Monitoring Program

Results plotted at mid-depth. Duplicate results averaged. Values below the practical quantitation limit shown as open circles.

Data table: sediment_aro



LEGEND

Sediment Elevation (ft)



- Armored Cap Area
- Southern Near Shore
- Near Shore Area
- Grasse River Shoreline
- Sediment Probing Transects

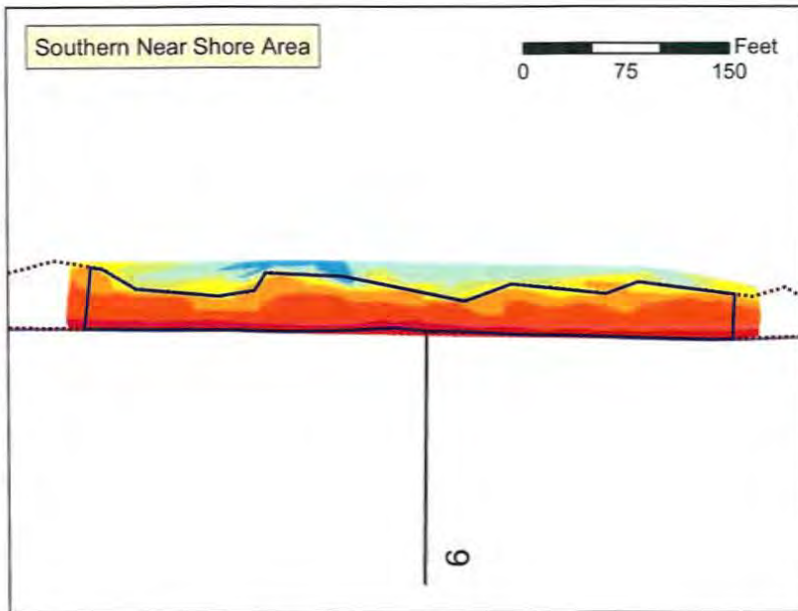
GRASSE RIVER STUDY AREA
MASSENA, NEW YORK

Figure A-12.
Baseline Sediment Elevations
for the Southern Near Shore
and Armored Capping Areas



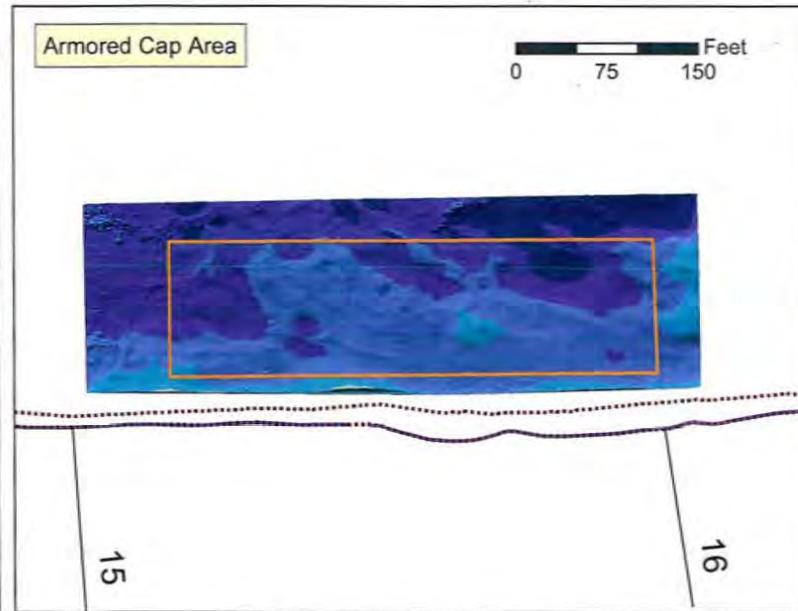
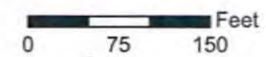
May 2005

Southern Near Shore Area

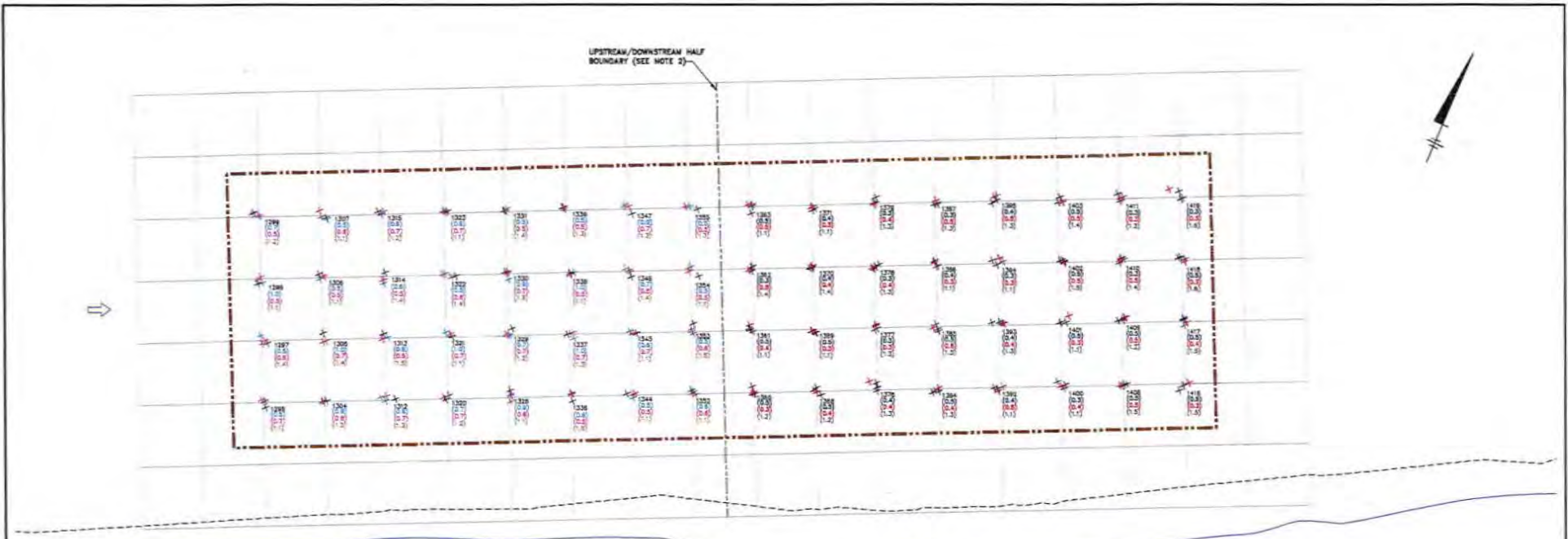


Elevations Measured During 2005 Baseline Survey

Armored Cap Area



Elevations Measured During September 12-13, 2005 Multibeam Survey



UPSTREAM/DOWNSTREAM HALF
BOUNDARY (SEE NOTE 2)



T15

T16

- LEGEND:**
- T16 1992 SEDIMENT PROBING TRANSECT
 - RIVER BOUNDARY
 - - - NEAR SHORE AREA
 - - - - - APPROXIMATE BOUNDARY OF ARMORED CAPPING AREA
 - ⇒ DIRECTION OF RIVER FLOW
 - X BASELINE ELEVATION GRID NODE LOCATION (APRIL/MAY 2005)
 - 1352 GRID NODE ID

- UPSTREAM HALF OF ARMORED CAP AREA**
- X DURING-CONSTRUCTION ELEVATION GRID NODE LOCATION - BASE LAYER (POST-CAPPING; SEPTEMBER 2005)
 - X DURING-CONSTRUCTION ELEVATION GRID NODE LOCATION - FILTER LAYER (POST-CAPPING; SEPTEMBER/OCTOBER 2005)
 - X DURING-CONSTRUCTION ELEVATION GRID NODE LOCATION - ARMOR LAYER (POST-CAPPING; OCTOBER 2005)
 - (0.4) BASE LAYER CAP MATERIAL THICKNESS (FT; SEE NOTE 3)
 - (0.4) FILTER LAYER CAP MATERIAL THICKNESS (FT; SEE NOTE 3)
 - (1.7) ARMOR LAYER CAP MATERIAL THICKNESS (FT; SEE NOTE 3)

- DOWNSTREAM HALF OF ARMORED CAP AREA**
- X DURING-CONSTRUCTION ELEVATION GRID NODE LOCATION - FILTER LAYER 2 (POST-CAPPING; SEPTEMBER/OCTOBER 2005)
 - X DURING-CONSTRUCTION ELEVATION GRID NODE LOCATION - FILTER LAYER 1 (POST-CAPPING; OCTOBER 2005)
 - X DURING-CONSTRUCTION ELEVATION GRID NODE LOCATION - ARMOR LAYER (POST-CAPPING; OCTOBER 2005)
 - (0.8) FILTER LAYER 2 CAP MATERIAL THICKNESS (FT; SEE NOTE 3)
 - (0.8) FILTER LAYER 1 CAP MATERIAL THICKNESS (FT; SEE NOTE 3)
 - (1.7) ARMOR LAYER CAP MATERIAL THICKNESS (FT; SEE NOTE 3)

NOTES:

1. BASEMAP TAKEN FROM PLANIMETRIC MAPPING PREPARED BY LOCKWOOD MAPPING, INC. USING 11/9/02 AERIAL PHOTOGRAPHY. EXTENT OF NEAR SHORE AREAS PROVIDED BY QUANTITATIVE ENVIRONMENTAL ANALYSES, LLC (QEA).
2. THE ARMORED CAP AREA WAS DIVIDED INTO AN UPSTREAM AND DOWNSTREAM HALF AS DIFFERENT LAYERS WERE PLACED IN THESE AREAS. THREE LAYERS WERE PLACED IN THE UPSTREAM HALF INCLUDING A 6-INCH BASE LAYER, 6-INCH FILTER LAYER, AND 12-INCH ARMOR LAYER. THREE LAYERS WERE ALSO PLACED IN THE DOWNSTREAM HALF INCLUDING TWO 3-INCH FILTER LAYERS AND A 12-INCH ARMOR LAYER. THE THICKNESSES PROVIDED HERE ARE ACTUAL; THICKNESS TOLERANCES ARE DESCRIBED IN EGN 027 REVISION 1.
3. CAP MATERIAL THICKNESS WAS DETERMINED BY CALCULATING THE DIFFERENCE BETWEEN THE 2005 BASELINE OR PREVIOUS CAPPING LAYER SURFACE ELEVATION AND THE MOST POST-CAPPING ELEVATION (I.E. ARMORED LAYER THICKNESS DETERMINED USING THE FILTER SURFACE ELEVATION AND THE POST-ARMOR LAYER ELEVATION).



GRASSE RIVER STUDY AREA
MASSENA, NEW YORK
REMEDIAL OPTIONS PILOT STUDY
DOCUMENTATION REPORT

**POST-CAPPING
ELEVATION MEASUREMENT RESULTS
FOR THE ARMORED CAPPING AREA**



FIGURE
2-22

X: 1080802.DWG, 1080802E.DWG, X31.TIF
C: DWG, DWT, PLOT
P: PLOTSET, PLOT, PLOT1
S: 5/22/06 5:19:45-NEE DLP MDP
1080802/1080802.DWG

Figure 2.10 Ice Jam Model Results at 8:30 am - March 28

Hour 26:00:00

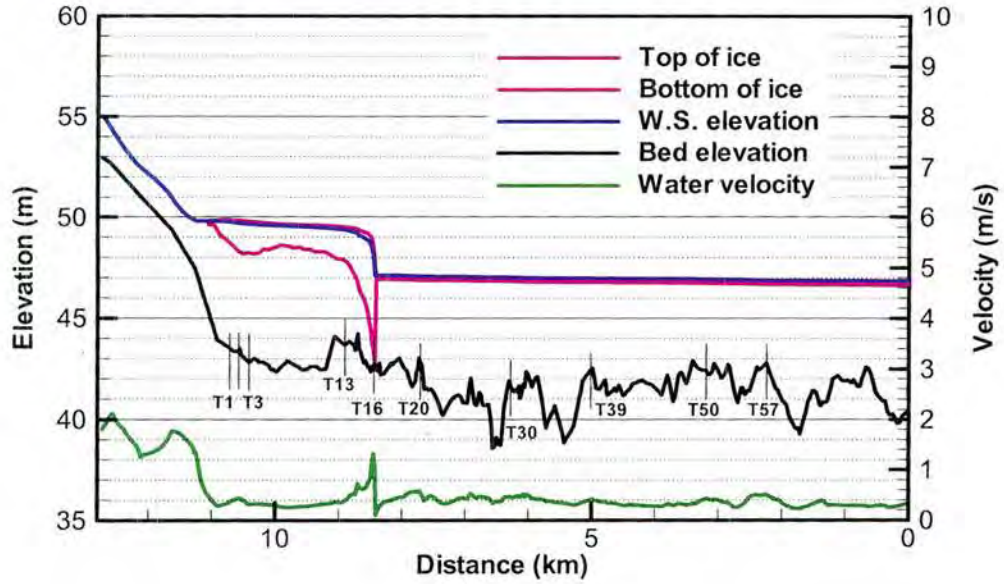


Figure 2.11 Ice Jam Profile at 8:30 am - March 28

Hour 26:00:00

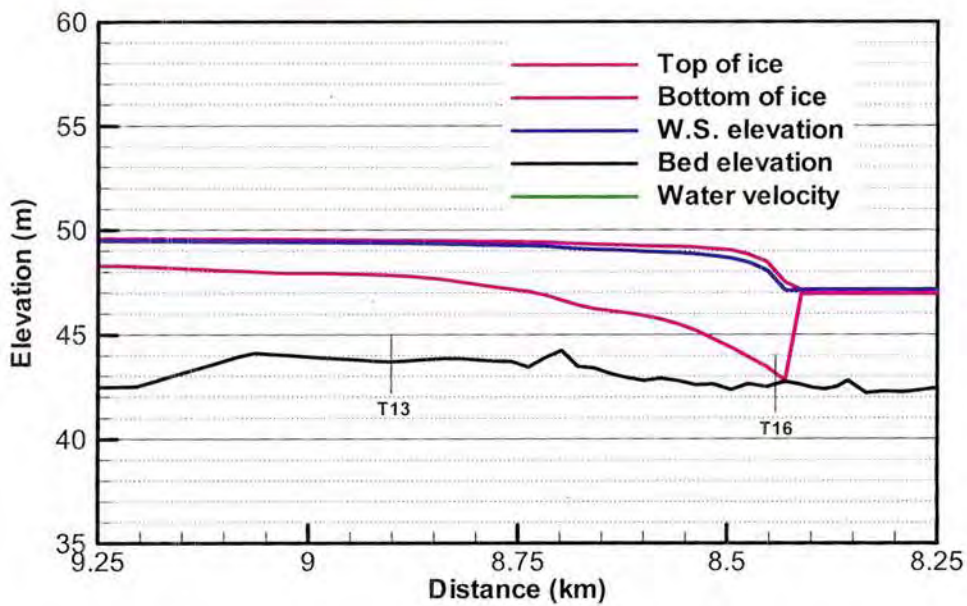


Figure 2.12 Simulated Ice Jam Thickness Distribution at 8:30 am - March 28

Hour 26:00:00

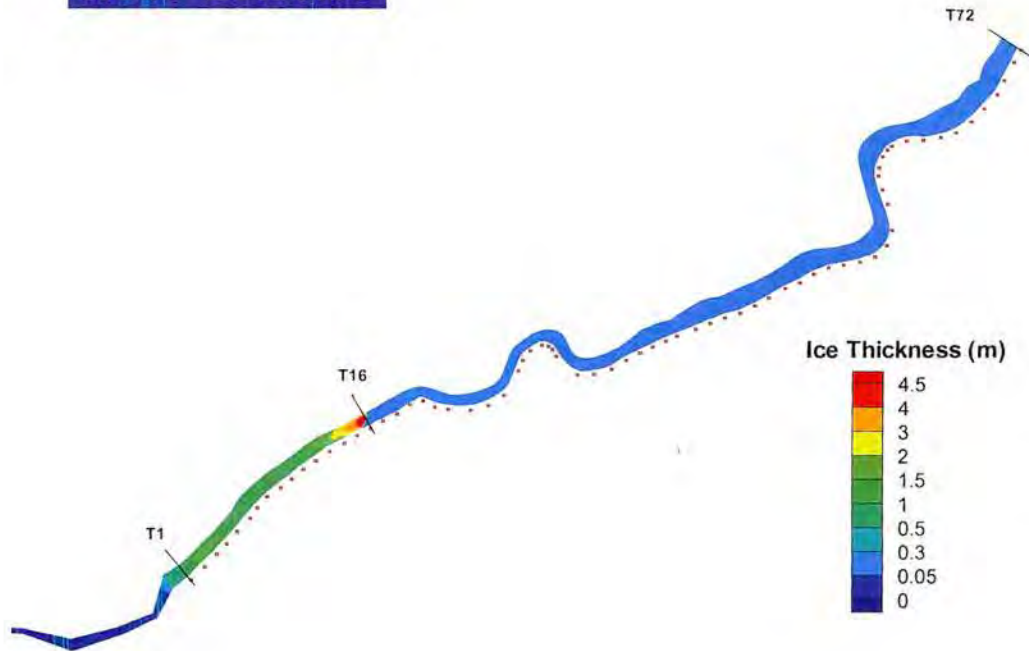


Figure 2.13 Predicted Ice Jam Thickness in Vicinity of T16 at 8:30 am - March 28

Hour 26:00:00

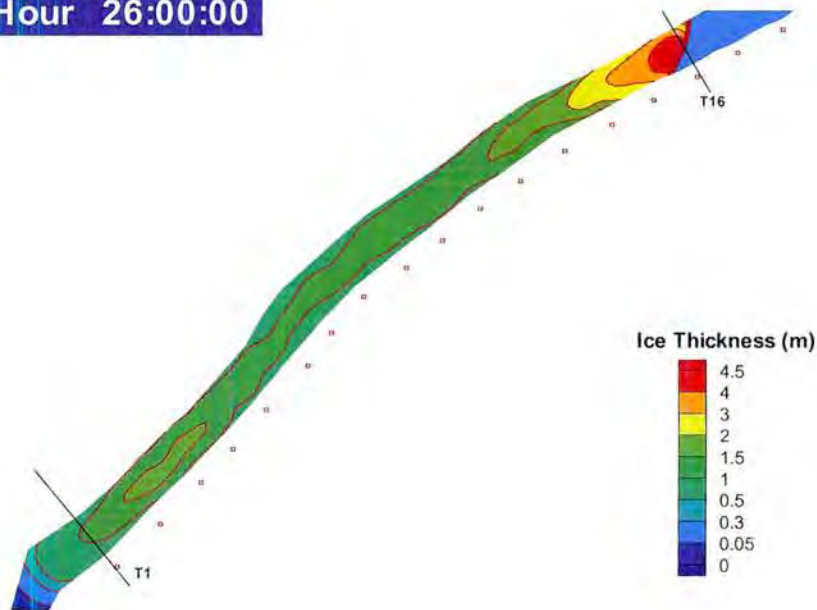


Figure 2.14 Predicted Water Depth Under Ice Jam at 8:30 am - March 28

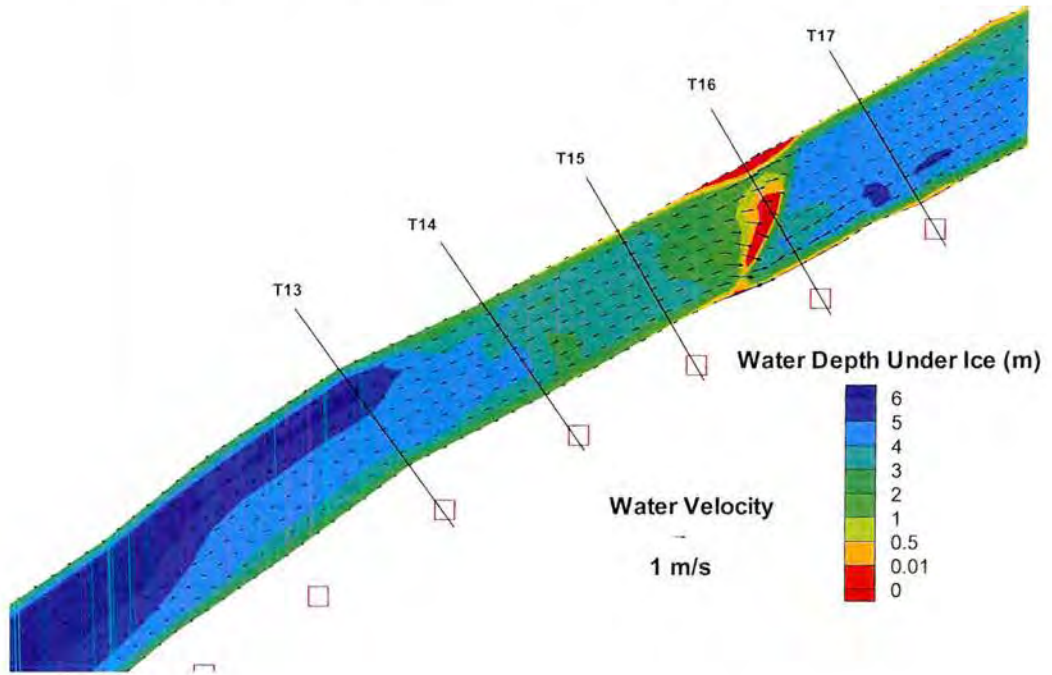


Figure 2.15 Predicted Current Velocity Under Ice Jam Near T16 at 8:30 am - March 28

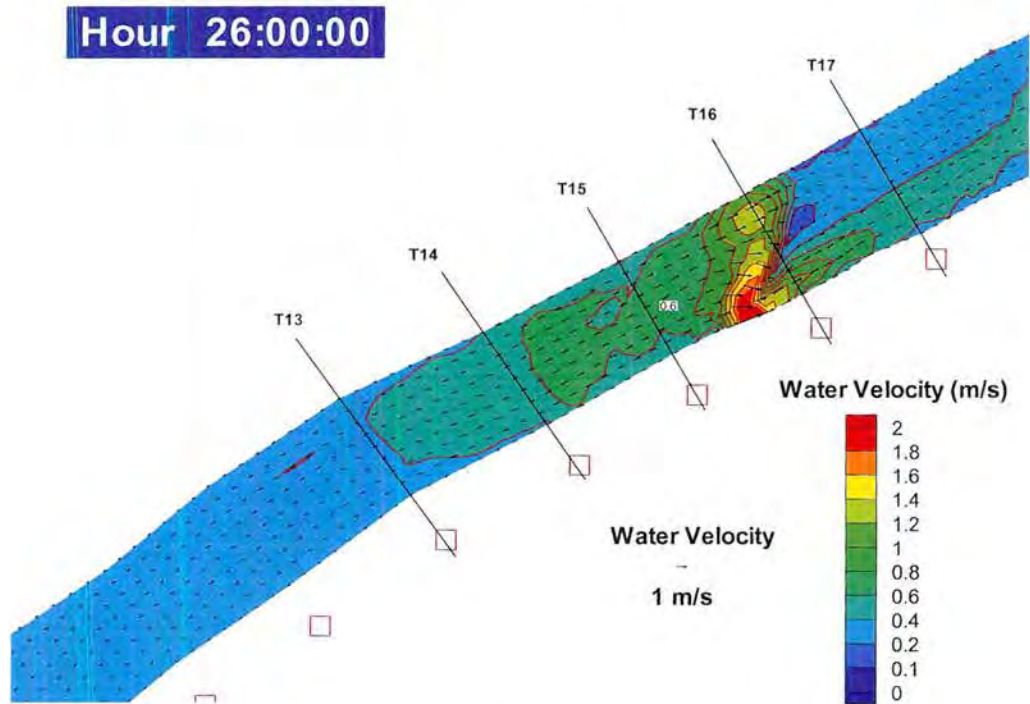


Figure 2.17 Ice Jam Model Results 15 minutes after Ice Jam Release (12:45 am - March 29)

Hour 42:15:00

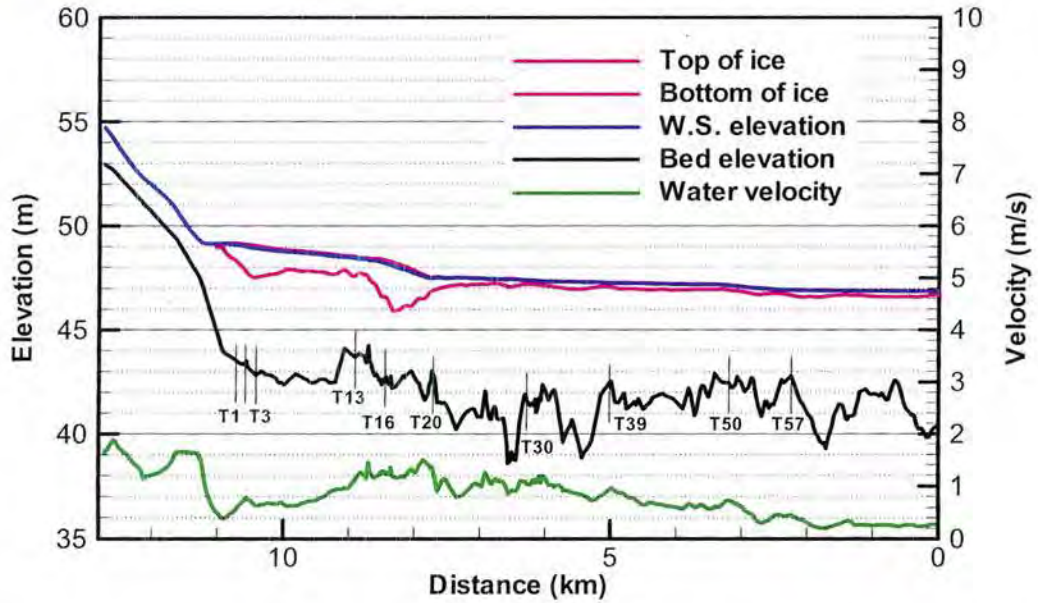


Figure 2.18 Ice Jam Model Results 30 minutes after Ice Jam Release (1:00 am - March 29)

Hour 42:30:00

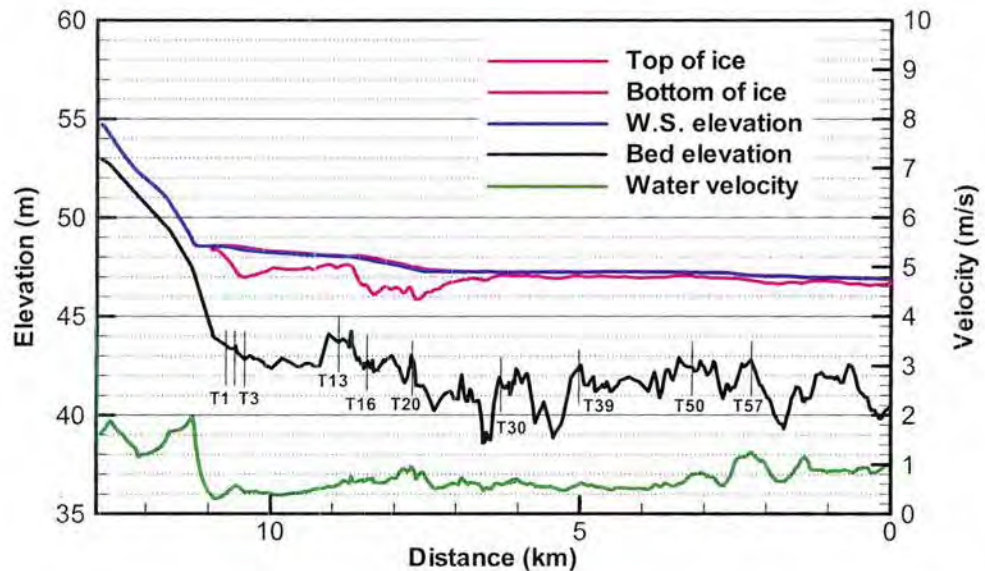


Figure 2.19 Ice Jam Model Results at 8:30 am – March 29

Hour 50:00:00

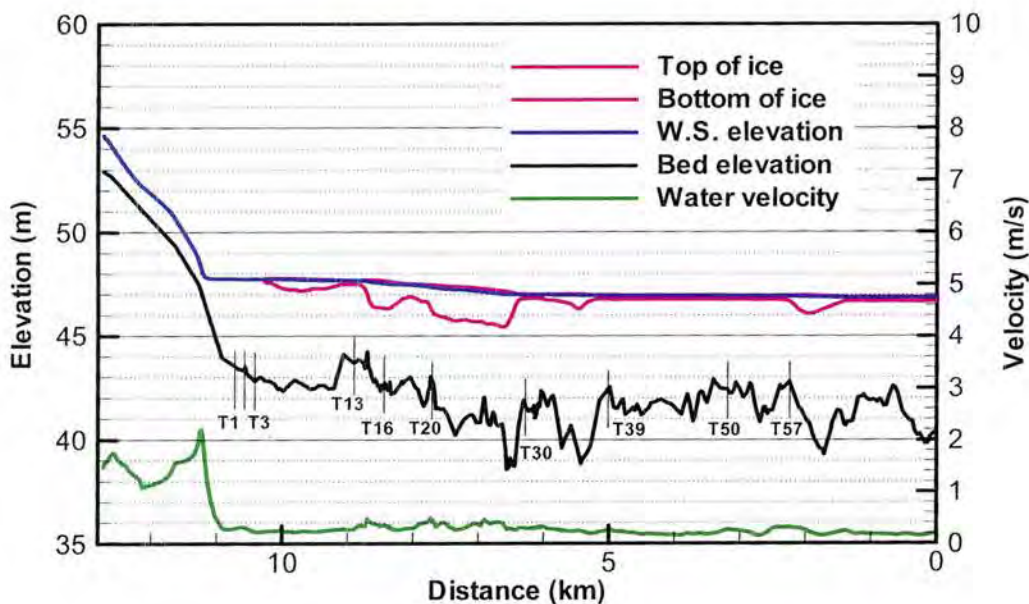


Figure 2.20 Ice Jam Model Results at 6:30 pm – March 29

Hour 60:00:00

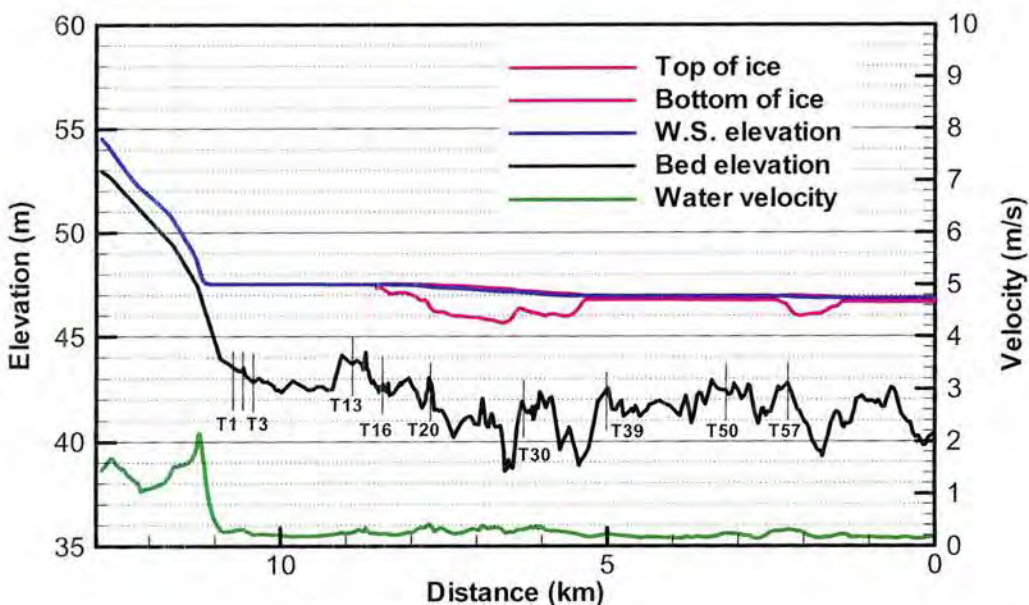


Figure 2.21 Ice Jam Model Results at 4:30 am – March 30

Hour 70:00:00

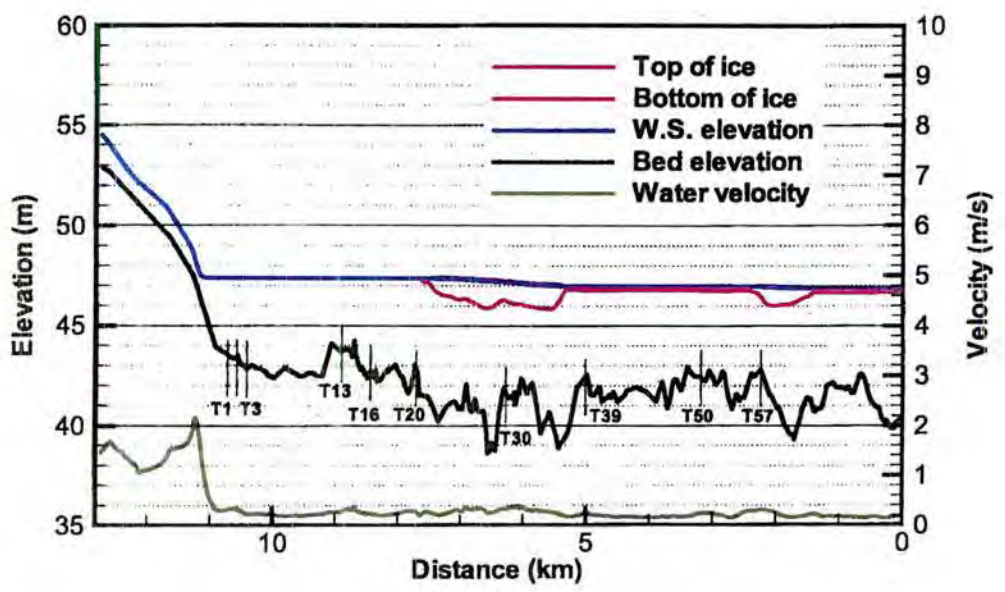


Figure 3.30 Ice Jam Profile with a Downstream Water Level Decrease of 0.5 m

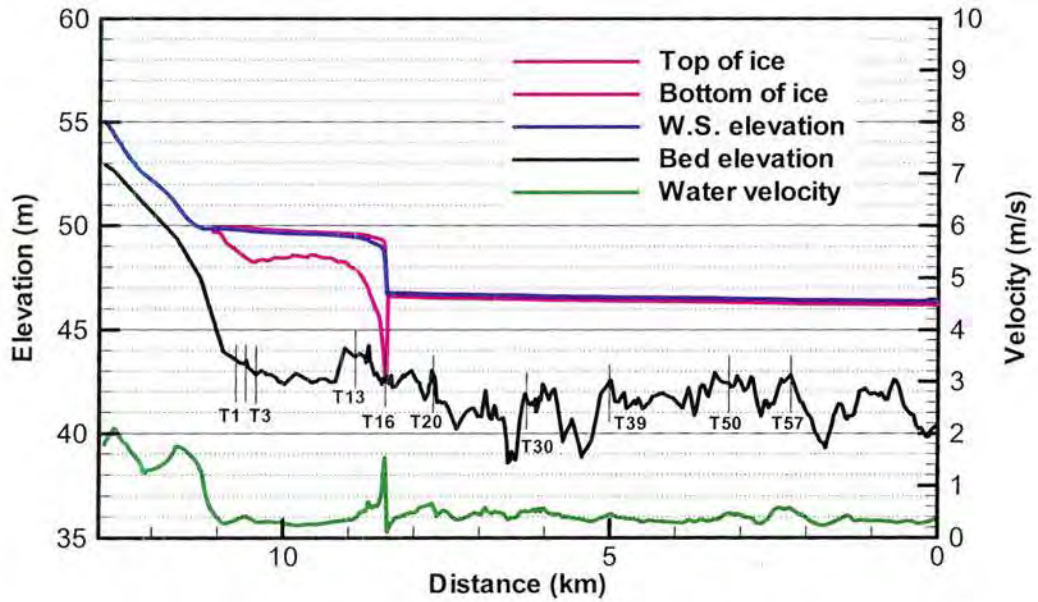


Figure 3.31 Ice Jam Profile Near T16 with a Downstream Water Level Decrease of 0.5 m

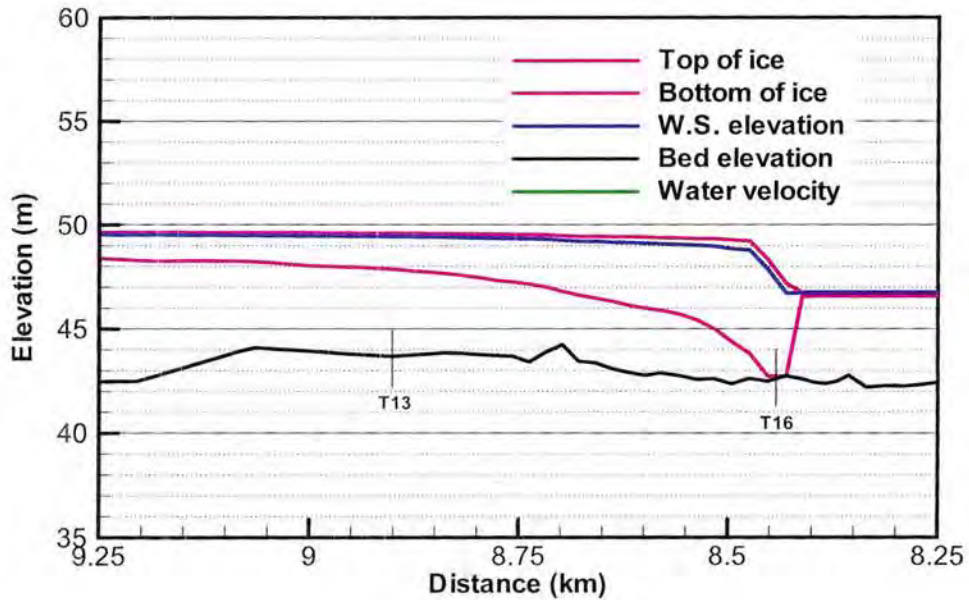
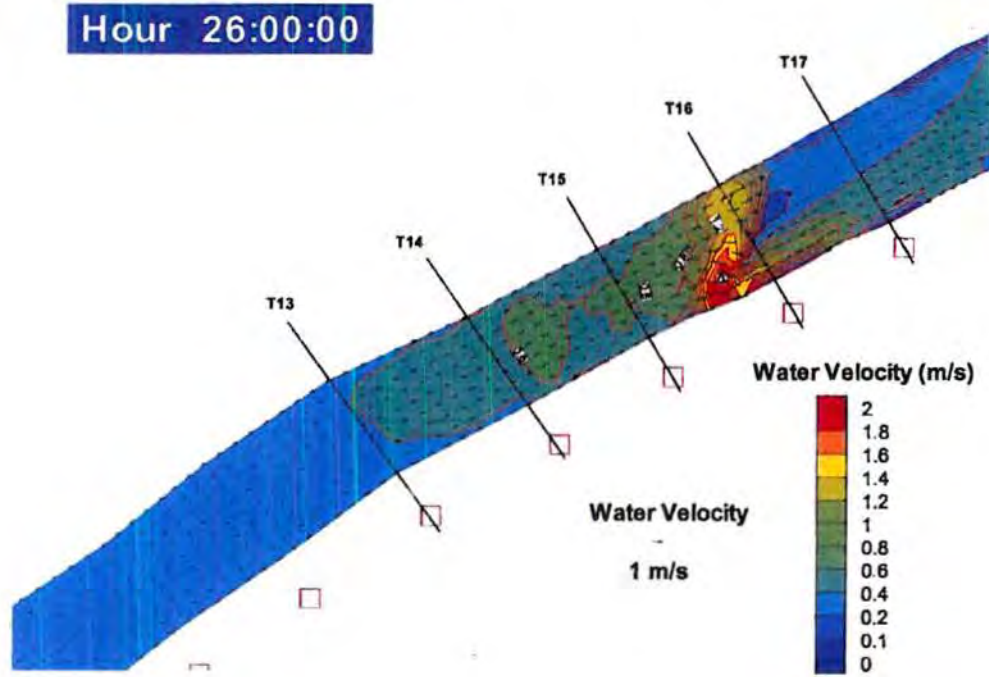
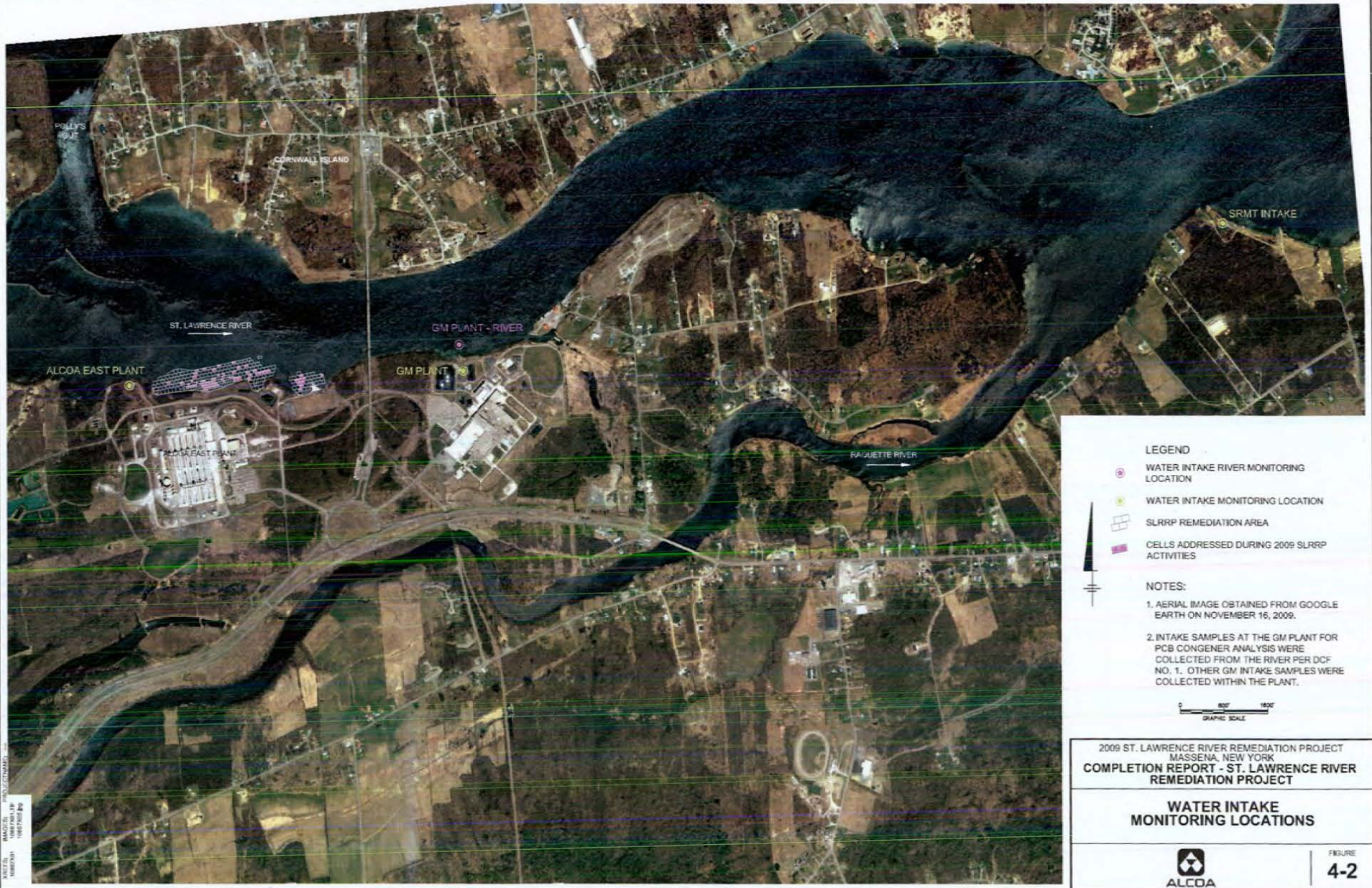


Figure 3.32 Simulated Water Velocity Distribution Under Ice Jam with a Downstream Water Decrease of 0.5 m





**APPENDIX II – a: COPIES OF COMMENT LETTERS SUBMITTED
DURING THE COMMENT PERIOD**

The copies of the comment letters received during the comment period are provided as a separate attachment to this Record of Decision.



Grasse River PRAP comments

Jacob Terrance

to:

Young Chang, Pietro Mannino

11/29/2012 01:45 PM

Cc:

"Ken Jock", "Privitera, John J.", "John D. Ciampa", "Jessica Jock", "Barbara Tarbell", "Ron Lafrance", "Paul Thompson", "Randy Hart", "Eric Thompson", "Shelley Jacobs", "Michael Conners"

Hide Details

From: "Jacob Terrance" <jacob.terrance@srmt-nsn.gov> Sort List...

To: Young Chang/R2/USEPA/US@EPA, Pietro Mannino/R2/USEPA/US@EPA

Cc: "Ken Jock" <ken.jock@srmt-nsn.gov>, "Privitera, John J." <PRIVITERA@mltw.com>, "John D. Ciampa" <jciampa@spectraenv.com>, "Jessica Jock" <jessica.jock@srmt-nsn.gov>, "Barbara Tarbell" <barbara.tarbell@srmt-nsn.gov>, "Ron Lafrance" <ron.lafrance@srmt-nsn.gov>, "Paul Thompson" <paul.thompson@srmt-nsn.gov>, "Randy Hart" <randy.hart@srmt-nsn.gov>, "Eric Thompson" <eric.thompson@srmt-nsn.gov>, "Shelley Jacobs" <shelley.jacobs@srmt-nsn.gov>, "Michael Conners" <michael.conners@srmt-nsn.gov>

History: This message has been forwarded.

7 Attachments



Sept. 7 comments.pdf



Sept. 20 comment letter.pdf



SRMT to Sec. Ind. Aff.-Alcoa Superfund-2.pdf



EPA Briefing Memorandum Final 9-11-12A.doc



Sept. 7 and August 2012 letter.pdf



Nov. 29 PRAP comments.pdf



Technical Review Summary ltr 11-29-12.pdf

160798-



12/11/2012

She:kon Young,

Attached to this email is copy of the Tribe's comments on the Grasse River proposed plan.

Also attached are:

- 1) Sept. 7 letter with August 2012 PRAP comments
- 2) Sept. 7 comment letter
- 3) Sept. 11 letter to the Sec. of Indian Affairs
- 4) EPA Memo from Hobbs-Straus
- 5) Sept. 20 comment letter
- 6) Technical letter from Spectra
- 7) NRDA DVD (available in hard copy only)

Niawen,

Jacob Terrance

Alcoa Superfund Oversight Specialist

(P): 518-358-5937 ext 135

(F): 518-358-6252

St. Regis Mohawk Tribe Environment Division

412 State Route 37

Akwesasne, NY 13655



St. Regis Mohawk Tribe

Chief Randy Hart
Chief Ron LaFrance Jr.
Chief Paul O. Thompson
Sub-Chief Shelley Jacobs
Sub-Chief Michael L. Conners
Sub-Chief Eric Thompson

November 29, 2012

Young S. Chang, Remedial Project Manager
United States Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Re: Grasse River Superfund Site Proposed Remedial Action Plan

She:kon/Greetings Young:

The Saint Regis Mohawk Tribe (SRMT/the Tribe) is pleased to submit these comments regarding the Grasse River September 2012 Proposed Remedial Action Plan (proposed plan). The previous comment letters (see attachments) have stated our concerns with the United States Environmental Protection Agency (USEPA) proposed plan for remediating the Grasse River on the Akwesasne Mohawk Reservation. As stated in the previous letters SRMT strongly believes that by not performing any main channel dredging, the proposed plan is not a truly protective or permanent remedy. The Tribe believes that capping must be relied on as a secondary measure after dredging has taken place (see section August 2012 PRAP of Sept. 7 comment letter). SRMT is doubtful that the uniformity required to construct an effective protective armor cap will be achieved due to the depths at which it must be placed (see section August 2012 PRAP of Sept. 7 comment letter). This letter adds further comments to those that submitted by the SRMT and our Environment Division. We respectfully request that all of our comments are reconsidered and responded to.

As an initial matter, the SRMT officially requests a delay in the EPA'S Decision for at least 6 months. SRMT requests this delay to allow EPA the time necessary to evaluate additional information regarding all dredging methods and containment combinations. Alcoa has had over twenty years to study the river and analyze data to justify capping of contaminated river sediments while the SRMT and other government agencies, and communities have had only two months to analyze and comment on the proposed plan. The tribe believes that a different method or methods of dredging and containment will be more effective than the previously practiced method in the 2005 ROPS. It is during this extension that Alcoa should investigate and present their full findings to USEPA and SRMT along with New York State Department of Environmental Conservation, National Oceanic and Atmospheric Administration and the other agencies.

160778



412 State Route 37
Akwesasne, New York, 13655
Phone: 518-358-2272

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Additional information has already been requested by EPA in the “*Addendum to July 2012 Analysis of Alternatives Report – Grasse River Study Area:*”

- (pg. 4) 5. **“The attached July 12 Alcoa AofA Report lacks sufficient information regarding habitat assessment, reconstruction, and monitoring.”** The extension should be sufficient time for Alcoa to present all the data in order to satisfy the lack of information as previously stated.

- (pg. 5) 6. **“EPA and New York State Department of Environmental Conservation (NYSDEC) disagreed with some line items of the cost estimates provided for the alternatives, believing that the costs listed for several of these line items were too high, particularly for the alternatives that included more significant amounts of dredging, and that these line items significantly impacted the overall estimate for those alternatives.”** Alcoa could use this time to further refine a more realistic cost estimation and remedial action length table along with new information regarding other dredging and containment techniques. As cost is a factor that the USEPA is required to consider, any decision based on the information currently provided would be a guess, at best.

- (pg. 5) 7. **“EPA disagrees with Alcoa's suggestion in the July 12 Alcoa AofA Report that dredging is not an appropriate component of a Site remedy...”** Although the USEPA believes that dredging will only be effective for the near-shore, perhaps a new dredging and containment method could prove to be more effective and efficient for the main channel as well and therefore enable a more protective and permanent remedy.

SRMT believes that the addition and evaluation of the requested information is necessary in order for the USEPA to fully evaluate the alternatives presented and has the potential to alter the ROD and therefore must be analyzed and presented before the ROD can be finalized.

In order to demonstrate the validity and efficacy of dredging as a remedial alternative please consider the following information. In the Hudson River, another Superfund Site that utilized dredging, the remedial action started in May 2009. In 2009, the amount dredged was estimated to be 270,000 cubic yards. In 2011, 363,000 cubic yards were dredged as well. In 2012, 650,000 cubic yards were also dredged. The total amount dredged for those three years is about 1.3 million cubic yards. That amount is comparable to the 1.5 million cubic yards that is targeted for Alternative 10 in the Grasse River proposed plan. However, in the Grasse River proposed plan, the 1.5 million cubic yards dredging in the 7.2 mile stretch of river is slated to take about 18 years to complete. Obviously the amount of debris does play a role in the rate of dredging but debris is not specifically unique to the Grasse River and it was most certainly encountered in the Hudson River.

In the Ashtabula River, 500,000 cubic yards of sediment was dredged in one season in 2009. The Reynolds Metals dredging project successfully removed contaminated sediments from the St. Lawrence River using mechanical dredging. During the 2005 Remedial Options Pilot Study (ROPS), dredging and containment measures were investigated to a limited degree. The main method used was horizontal auger dredging with some mechanical dredging with silt curtains.

The Tribe feels that all methods of dredging with accompanying containment measures must be more fully investigated in order to decide on a method or combination of methods that will enable main channel dredging.

In the September 2012 proposed plan, in order to give a more historically accurate and complete picture of Alcoa's previous actions, the following language change is proposed: In the column on the right on page 2, the second to last sentence in the first paragraph should read: "The Site poses an increased risk to human health and the environment due to *the illegal and irresponsible release of hazardous substances into the Grasse River. According to a July 12, 1991 New York Times article, Alcoa agreed to pay \$7.5 million dollars for "improperly possessing, transporting and disposing of hazardous waste" and "endangering the environment." This criminal action resulted in the presence of PCB contamination in Grasse River sediment*

EPA has agreed to designate the Grasse River site as a potential Environmental Justice Site for consideration in remedial decision-making. The delay in decision making on the PRAP should be used to confirm the EJ designation before a decision is made on this site since the Mohawk community will be the most directly and seriously affected minority community. EPA's draft policy on Environmental Justice for Tribes and Indigenous People states,

"The EPA defines environmental justice as:
the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

We are asking for the fair treatment and meaningful involvement EPA defines as environmental justice.

In the view of the SRMT and the broader Akwesasne community, "Environmental Justice" means that when a clear environmental injustice is identified, as here, EPA must take action to correct the injustice. Just as, in an ordinary case of illegal disposal of hazardous waste, EPA requires the polluter to clean up the waste as part of the resolution of the case, ALCOA's illegal pollution of the Grasse River must require removal of the hazardous waste from the river if environmental justice is to be achieved.

The finding that Akwesasne is an environmental justice community must necessarily change the course of decision making if EPA's Environmental Justice Policy is to have any meaning. It is simply unfair and unjust to the Akwesasne community to give ALCOA the financial benefit of their illegality, particularly when that illegal behavior saved the company millions of dollars in proper disposal costs and the past corporate behavior continues to carry such a devastating ecological and cultural consequence. Equity can only be gained by a complete cleanup.

Meaningful environmental justice policy must also breathe life in to the long term; detailed ecological and cultural restoration plan designed and agreed upon among the NRD Trustees by guarding against any risk that the proposed remedy of a thin sand cap ever fail. Nothing in the PRAP provides this level of confidence. An environmental justice community such as

Akwesasne is entitled to a complete, permanent remedy, as CERCLA requires, to protect against an unforeseen event in the millennia to come that could expose old PCB's to biota to any degree. The contamination must be removed from the river to ensure the hope of long term natural resource restoration.

The Saint Regis Mohawk Tribe is lead administrator for the St. Lawrence Environmental Trustee Council, "the Trustees" which includes the National Oceanic and Atmospheric Administration, the United States Department of Interior Fish and Wildlife Service, and New York State Department of Environmental Conservation. The Trustee goal is to protect and restore the ecosystem and its services to compensate the general public and tribal community for injuries resulting from releases of hazardous materials.

The Federal, State and Tribal trust resources that have been injured by releases of hazardous material include but are not limited to, lands, sediment/benthos, flora and fauna, water, birds, reptiles, amphibians, fish, mammals and/or their associated habitats and services provided by these natural resources.

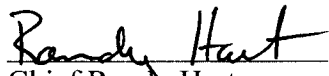
The Trustees have identified candidate restoration projects for the St. Lawrence watershed including the Grasse River. Restoration projects must be designed to restore, enhance, create, and/or otherwise acquire the equivalent of injured resources and services. The SRMT believes the uncertainties associated with EPA's preferred remedy and the potential for recontamination of sediments will hinder Trustee implementation of any restoration for the Grass River on behalf of the public.

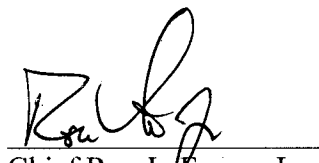
The implementation of traditional cultural practices among the community of Akwesasne is also at risk with the chosen remedy. The historical release of hazardous materials has severely impaired the traditional resource harvesting practices by Mohawks in the Grasse River area. As a result, the community as a whole has been denied the ability to provide their families with healthy foods; denied the ability to fulfill traditional obligations toward the land, waters, plants and animals; and denied the ability to pass on practical, theoretical, philosophical and linguistic knowledge of what it means to be Mohawk. To restore this relationship and connection to the Grasse River and its resources, it is intended that Mohawks will revive this traditional knowledge through a mentoring project that utilizes key individuals to teach other committed Mohawks various harvesting practices over a sustained period of interaction on the land. It would be detrimental and demoralizing to Akwesasne community to have invested the time and commitment then suffer a potential resuspension of contamination in the Grasse River.

To demonstrate the devastating effects already endured by the Mohawks of Akwesasne from the release of hazardous substances, the SRMT attached a short informative video "Cultural Impact Assessment". The video presents a summary of research conducted and encourages public involvement in the cultural restoration component. See enclosed video.

SRMT truly appreciates the opportunity to comment on the September 2012 proposed plan and thanks the USEPA for their consideration of these comments.

Niawen/Thank you,


Chief Randy Hart


Chief Ron LaFrance Jr.


Chief Paul O. Thompson

CC: Walter Mugdan, EPA Region 2
Pietro Mannino, EPA Region 2
Douglas Fischer, EPA Region 2
Doug Garbarini, EPA Region 2

Enc: Sept. 7 letter with August 2012 PRAP comments
Sept. 7 comment letter
Sept. 11 letter to Sec. of Indian Affairs
EPA Memo from Hobbs-Straus
Sept. 20 comment letter
NRDA DVD (hard copy only)
Technical Letter from Spectra

ELECTRONIC RECORD TARGET SHEET

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CERCLIS ID:	NYD980506232
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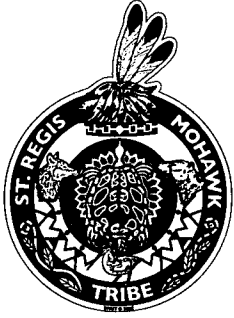
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DOCUMENT FORMAT:	DVD - AUDIO_TS / VIDEO_TS
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NATIVE FORMAT LOCATION/FILENAME:	DVD\ID:\VIDEO_TS
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COMMENTS:	VIDEO IS ON DVD AND CAN BE REVIEWED IN THE R2 SF REMEDIAL RECORDS CENTER ON THE 18TH FLOOR
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Saint Regis Mohawk Tribe

Environment Division

Ken Jock,
Director

September 7, 2012

Mr. Walter Mugdan, Director
United States Environmental Protection Agency
Region 2 – Emergency and Remedial Response Division
290 Broadway, 16th Floor
New York, New York 10007-1866

Re: Grasse River Superfund Site
Remediation alternatives Analysis

She:kon/Greetings Mr. Mugdan:

As you are aware, the St. Regis Mohawk Tribe (SRMT) previously provided you comments on EPA's August 2012 Draft PRAP for the Grasse River Site. In that letter, we expressed our concern about EPA's preferred remedy (Alternative 6), which would include dredging of the sediment located in the Near Shore and capping of the Main Channel. Since this proposed remedy only permanently removes about 7% of the impacted sediment in the project site and the river is subject to unpredictable ice scour events, SRMT believes that the selected remedy must include dredging of the Main Channel. Without Main Channel dredging, the vast majority of PCB impacted sediment will remain in the river and be subject to potential remobilization from future ice scour events. While Alcoa has proposed an armored cap to resist ice scour, SRMT believes that this only provides a false sense of security. The ice scour events are not well understood and unpredictable. The 2003 ice jam at transect T16 resulted in the mobilization of 32,000 cy of sediment in a single, dynamic event that most likely occurred in only a few hours. Scour depths of up to 5 feet were measured and sediment was transported at least 4,000 feet downstream. While Alcoa has presented a conceptual design for an armored cap to protect against ice erosion, SRMT is fearful that this cap cannot be placed effectively through water depths that can exceed 15 feet. Nor was it conclusively established that it will withstand the extreme erosive forces. Because of this, it is only prudent to remove as much sediment as possible to minimize recontamination and future releases of PCBs to the water column and fish.

While we recognize that Main Channel dredging will not be easy or inexpensive, we believe that it provides the best long term solution. Certainly the interest of SRMT and the greater community is not well served by a remedy that does not include Main Channel dredging. Leaving 93% of the PCB sediment in the river presents a significant future risk of

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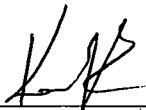
412 State Route 37
Akwesasne, New York 13655
Phone: 518-358-5937
Fax: 518-358-6252
www.srmtenv.org

recontamination that would require additional site characterization, engineering evaluation, and further remediation. The monetary cost of such activities is difficult to quantify and was not considered by Alcoa or EPA.

In addition to the need for Main Channel dredging, SRMT also believes that the capping design below transect T21 should be improved. As presented in our previous correspondence to you (date), there is evidence that sediment is not stable throughout this entire section of the river. Below T21, Alcoa has proposed to utilize a 12-inch thick cap composed of a sand/topsoil mixture. Since sediment cores indicate that coarse grain deposits are present to at least transect T46, SRMT believes that the proposed design should be improved to mitigate episodic high energy events. Although Alcoa should be responsible for completing a thorough engineering evaluation in this area, we recommend that a six-inch thick gravel layer be placed on top of the 12-inch sand/topsoil cap below T21. It appears that this cap enhancement should extend at least to transect T46, but additional sediment cores should be collected to more clearly establish a downstream limit.

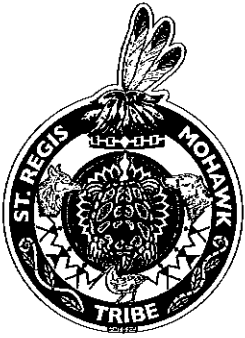
SRMT appreciates your consideration of these suggestions and we are certainly available to discuss them in the near future.

Skennen/Peace,



Ken Jock

CC: Young Chang, EPA Region 2
Pietro Mannino, EPA Region 2
Douglas Fischer, EPA Region 2
Doug Garbarini, EPA Region 2



St. Regis Mohawk Tribe

Chief Randy Hart
Chief Ron LaFrance Jr.
Chief Paul O. Thompson
Sub-Chief Shelley Jacobs
Sub-Chief Michael L. Conners
Sub-Chief Eric Thompson

September 7, 2012

Walter Mugdan, Director
Emergency and Remedial Resource Division
United States Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007-1866

Dear Mr. Mugdan:

The Saint Regis Mohawk Tribe is in the process of reviewing the draft Proposed Plan for the Grasse River Superfund Site, and we require additional time to prepare for consultation with EPA about some concerns with language used in the draft. We understand that a deadline of Sept. 7 for submitting technical comments was communicated to the Tribe's staff. However, we are concerned that the Proposed Plan does not properly address the status of the Tribe and its reservation with regard to the Grasse River, and we want to have a chance to fully communicate and consult with your office before the Proposed Plan is finalized. There are some important principles about the sovereign status of the Tribe and its treaty rights that we believe need to be fully discussed and reflected in the Proposed Plan.

We request that the consultation be delayed for approximately 30 days so that the Tribe may submit additional comments into the record and the Departments of Justice (DOJ) and Interior (DOI) can be asked to provide information on the points discussed below before we meet and prior to publishing the Proposed Plan.

In that vein, the Tribe also requests that the EPA formally seek the views of the Department of the Interior who are tasked with protecting tribal lands and resources. The Secretary of the Interior is generally given deference on the determination of tribal sovereignty and land interests and, based on our discussions with the DOI, we understand that EPA Region 2 has failed to contact or otherwise coordinate with the Secretary of the Interior on this question. The Secretary has already taken positions regarding the Tribe's reservation and the interpretation of the Sherrill case as it applies to this analysis. The Tribe requests that EPA defer to the DOI positions which have also been asserted in litigation by the Department of Justice.

We have examined the record of communications up to this point, and we believe that we have failed to present clear and convincing information on two primary issues: 1) the Reservation status of the Grasse River meadows, and 2) the status of the Tribe's PCB sediment standard as a relevant and appropriate requirement. We have asked our attorneys to prepare a thorough review of these important issues and to prepare detailed comments for your information. Some of the information is briefly discussed below.

So as not to delay the process, we are attaching the Tribe's technical comments on the draft PRAP. We will however, provide further suggested edits with our detailed comments that directly address the issues discussed below.

The first issue concerns the reservation status of the Grasse River meadows bordering the Grasse River. It is important for EPA to recognize that the meadows bordering the Grasse River were specifically reserved by Treaty of 1796, and have reservation status. As we understand it, the EPA regards the "Akwesasne Reservation" as referred to in the draft PRAP, as those lands set aside in the 1796 Treaty that are currently undisputed as reservation land.

The 1796 Treaty states, in part:

“ . . . that there shall be reserved, to be applied to the use of the Indians of the said village of St. Regis, in like manner as the said tract is to remain reserved, a tract of one mile square, at each of the said mills, and with the meadows on both sides of the said Grass river from the said mill thereon, to its confluence with the river St. Lawrence.”

Thus, it is important for the Proposed Plan to recognize that the meadows on both sides of the Grasse River are lands that were set aside for the Tribe by Treaty and are still part of the Tribe's reservation, “in a like manner” as the lands of the Akwesasne Reservation.

It is true that the Tribe has an existing land claim for land along the Grasse River that is being pursued, not only by the Tribe, but also the United States. While the Grasse River lands were sold to the State in the 1800's, that sale was not approved by the Federal Government under the Nonintercourse Act. 25 U.S.C. § 177. But well-established case law has found such lands in similar circumstances were not legally acquired and still retain reservation status. See e.g., *Oneida Indian Nation v. Madison County*, 665 F.3d 408, 444 (2d Cir. 2011).

We will show in our detailed comments that the United States has consistently taken the position that the Tribe's 1796 reservation has never been diminished and that the boundaries established by that treaty still exist. The DOJ and the DOI Office of the Solicitor agree with the Tribe with regard to the reservation status of the lands on both sides of the Grasse River. That is, the land is still within original reservation boundaries.

To be clear, the purpose of this discussion is to request that EPA's Proposed Plan properly identify the Grasse River meadows as reserved land, not just reserved resources. The Tribe is not asking EPA to make a finding of Tribal jurisdiction over these lands. Instead, EPA is asking that the Proposed Plan, in the last paragraph of the Site Description (bottom of p. 3), properly describe the meadows, and we will provide our suggested language separately. The principle that is important to the Tribe is that EPA properly recognize, in the Proposed Plan, the reservation status of the meadows, consistent with the positions of DOJ and DOI.

A second issue concerns how the Proposed Plan addresses the status of water quality standards for PCBs in sediments that have been promulgated by the Tribe and approved by EPA. After EPA granted "treatment as a state" status to the Tribe under the Clean Water Act, it approved the Tribe's water quality standards promulgated by the Tribe by letter dated Sept. 14, 2007. The standards approved by EPA include a standard for PCBs in sediments, which is 0.1 mg/kg. The draft Proposed Plan labels this standard as "to be considered" rather than an ARAR. We appreciate that the Plan establishes a stringent standard for fish tissue that reflects the fish consumption patterns of Tribal members. We also recognize that the Tribe's other water quality standards would not be considered ARARs because there are other federal and state standards that are more stringent than the Tribe's, as communicated in a letter from Mr. Mugdan dated Sept. 28, 2011.

However, the Tribe believes that its sediment standard for PCBs should be considered an ARAR, as a "relevant and appropriate" standard. It has been clear since the 1990 amendments to the National Contingency Plan that properly promulgated tribal standards are treated as ARARs consistently with State requirements. 55 FR 8741 (March 8, 1990); ARARs Q's & A's, Q7, OSWER 9234.201/FS-A; and Contaminated Sediment Remediation Guidance for Hazardous Waste Sites, Sec. 3.3, OSWER 9355.0-85.

The sediment standards are relevant and appropriate for the cleanup of the sediments in the bed and banks of the Grasse River because Tribal members use the waters of the Grasse River in the same manner as they use water bodies on the Akwesasne Reservation and other nearby water bodies. While the Tribe is not at this time asserting that its standards are "applicable" for the cleanup of the river bed, we believe that the Tribe's sediment standards address a situation that is similar to that found at the Akwesasne Reservation. As noted in the Treaty, the Grasse River meadows were reserved to be used "in like manner" as the main reservation.

The Tribal members have historically fished in all the water ways in the area, and there is a great deal of information that shows Tribal members have traditionally fished in the Grasse River. We believe that Tribal members who would consume

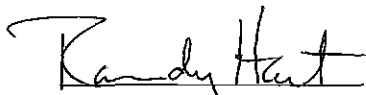
fish from the Grasse River should be protected in the same way as Tribal members who consume fish from water bodies on the Akwesasne Reservation and other nearby rivers. We also note that in the draft Proposed Plan, EPA agrees with the Tribe that risks to Tribal members are at issue in the Grasse River cleanup by establishing a more stringent fish tissue level to be reached.

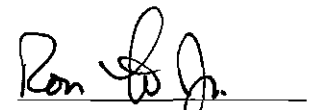
Still, we recognize that the Tribe's PCB sediment standard would be difficult, if not impossible, to meet in the Grasse River. Therefore, it may be necessary for EPA to decide that it is technically impracticable to achieve the Tribe's PCB sediment standards. The draft Proposed Plan already includes technical impracticability waivers for two New York State standards. The Tribe would like the Grasse River sediments to be cleaned to meet the Tribe's standards, and for the cleanup to allow for unrestricted fishing in those waters. However, we recognize that may not happen in the near future. We can accept an EPA decision that would waive the Tribe's sediment standard as an ARAR based technical impracticability. The principle that is important to the Tribe is that EPA recognize that the Tribe's validly promulgated and EPA-approved PCB sediment standard is an ARAR at the Grasse River Superfund Site, as a relevant and appropriate standard.

We recognize that EPA is anxious to issue the Proposed Plan and proceed with the cleanup. The Tribe is requesting that EPA provide a little more time for the Tribe to prepare comments and meet so that the Proposed Plan when issued will be as accurate as possible and will properly recognize the status of the Tribe.

To that end, Rich McAllister, one of our attorneys from Hobbs, Straus who is assisting in this matter will be contacting you to have a preliminary discussion regarding these concerns.

Sincerely,


Randy Hart, Chief


Ron Lafrance, Jr. Chief


Paul O. Thompson, Chief

cc: Young Chang, Project Manager
Environmental Protection Agency, Region 2

Doug Fischer, Counsel
Environmental Protection Agency, Region 2

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**ST. REGIS MOHAWK TRIBE, TECHNICAL COMMENTS ON THE
DRAFT (AUGUST 2012) SUPERFUND PROPOSED PLAN (PRAP)
GRASSE RIVER SITE**

9/7/12

The Saint Regis Mohawk Tribe (SRMT) appreciates this opportunity to provide technical comments on EPA's draft of the PRAP for the Grasse River Superfund Site. We recognize the effort that EPA has put forth in reviewing Alcoa's site-related information and developing this proposed plan. SRMT concurs with EPA's desire to dredge sediment from the entire Near Shore area of the Lower Grasse River (transects T1 through T72). However, SRMT strongly believes that the remedy selected by EPA does not adequately address the Main Channel sediment areas, which contain the overwhelming majority of PCB-impacted sediment. As summarized in the table on page 17 of the Draft PRAP, the Near Shore area contains 108,700 cubic yards (cy) of sediment impacted by PCBs at a concentration of 1 part per million (ppm) or greater. In contrast, the Main Channel contains about 1.554 million cy of sediment impacted by PCBs at the equivalent 1 ppm concentration. As such, EPA's preferred remedy (Alternative 6), only proposes to remove a very small fraction (less than 7%) of the impacted sediment.

While SRMT recognizes that EPA's selected remedy will address the Main Channel sediment with a cap, we believe that there is a high degree of uncertainty associated with the permanence and protectiveness of a capping-only remedy. This uncertainty is primarily related to the ability to effectively place the capping materials in an underwater riverine environment and, more importantly, to the lack of understanding of the erosive forces associated with ice jams in the river.

Based upon previous pilot dredging efforts during the ROPS and NTCRA, SRMT recognizes that dredging in the Main Channel will not always achieve the sediment cleanup objective of 1 ppm at all locations. Because of this, we agree that a capping component will be necessary in both the Near Shore and Main Channel areas. However, SRMT believes that the capping component should generally be considered a "secondary" remedy to be utilized after best efforts have been made to remove the impacted sediment through dredging. Mass removal of contamination from the river is the preferred remedy to reduce risk of future mobilization of PCBs into the environment. There are a number of concerns associated with the wide-scale implementation of cap placement through the water column in a river setting. Included are concerns about the uniformity of cap thickness, stability of the cap in steep-sloped areas, and the ability to place an effective armored cap that would require the "dumping" of cobbles onto a previously placed sand/topsoil layer. Although an armored cap was installed during the ROPS project in 2005, it was difficult to assess its effectiveness since physical samples could not be collected through the armored layer. As indicated on page 47 of the A of A Report (July 2012), only about 35% of the upstream portion of the armored cap area achieved the design thickness, while only 23% of the downstream cap area achieved the target thickness.

Suggested PRAP Revisions

Requirement for Main Channel Dredging – As indicated above, the vast majority of PCB sediment in the Lower Grasse River is present within the Main Channel. While EPA proposes to address these areas by capping alone, SRMT does not believe this goes far enough in developing a long-term permanent remedy that reduces the availability of PCB to the biota and water column. The need for additional sediment removal is necessary due to significant uncertainties associated with the site conceptual model and the physical limitations of effectively placing caps through the water column. As such, SRMT believes that Alternatives 9 and 10 are superior compared to EPA’s preliminary selection of Alternative 6. SRMT’s preferred alternatives include the complete removal of impacted Near Shore sediment consistent with EPA’s recommendation, but with the addition of dredging from the Main Channel.

SRMT recognizes that sediment dredging in the Main Channel may temporarily cause PCB concentrations to increase in the water column and biota due to resuspension during the dredging program. However, we believe that the permanent removal of PCBs from the system outweighs the short-term risk of this increase. In addition, it is important to recognize that Alcoa’s model projections of the future remedy effectiveness (page ES-15, A of A Report, July 2012) does not include potential impacts from an ice-scour event. It also assumes that the capping materials can be successfully placed as designed. These serious shortcomings limit the usefulness of the modeling projections.

With respect to ice scour, it has only been recently learned that this is the most dramatic and significant mechanism by which sediment is eroded and transported. In fact, in a prior version of the Analysis of Alternatives Report (June 2002), Alcoa made no mention whatsoever of ice scour and ice jams. This prior report was prepared after 10 years of studies and collection of more than 3,500 environmental samples. In that report, Alcoa claims that they had a “comprehensive understanding of the river” (page 2, Executive Summary) and in the listing of Key Findings (page 3, Executive Summary), Alcoa also stated that “buried sediments are isolated and sequestered and expected to remain stable.” It was not until 2003 that Alcoa realized that the erosive forces associated with ice jams could scour up to 5 feet of sediment from the riverbed. In spring 2003, a sand cap placed by Alcoa that was intended to isolate PCBs was completely eroded by an ice event and deeper PCB sediments, believed to be “sequestered”, were scoured and transported downstream. Alcoa estimates that about 32,000 cy of material was scoured in that single event.

Since the 2003 ice jam, additional studies have been conducted to better assess this phenomenon and understand its potential impacts to remedial alternatives in the river. However, SRMT is not fully confident that there is an adequate understanding of ice jams and resultant scour forces in the Main Channel to rely solely on capping as a long-term remedial solution. Specifically, the studies to date leave doubt with regard to the downstream limit of ice jam formation, the magnitude of the scour forces, and the lateral extent to which erosion occurs.

Specific Technical Concerns

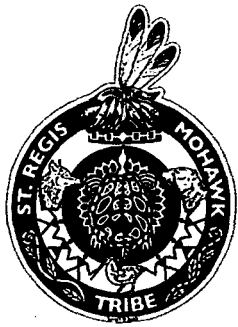
Ice Jams

1. Frequency and Extent – As previously indicated, prior to the 2003 event at transect T16, Alcoa was not aware that ice jams occurred in the river even though they had been studying the river for more than 10 years. Subsequent to this event, research has indicated that 6 jams are believed to have occurred in the past 40-50 years. In addition, meteorological conditions suggest that 5 other events could have occurred in that time period but no physical evidence confirmed this (Addendum to the CCLGR, April 2009). To better understand the downstream extent of the occurrence of ice jams, Alcoa primarily relied upon physical evidence of tree scars along the edge of the river. As indicated in Figure 4-2 of the CCLGR Addendum, tree scars were observed along the edge of the river as far downstream as transect T49. However, in Alcoa’s judgment, it is not believed that tree scars below T16 were related to ice-jam events. In their opinion, these scars were attributable to sheet-ice floes rather than jams based on the lower elevation of the scar. While this is one theory, it is certainly not definitive proof that ice jams don’t occur below T16. It may suggest that the magnitude of the jams is less in this section of the river but jams could occur and produce higher erosive forces than currently anticipated. Higher erosive forces would most likely effect caps below T21 since no armoring is proposed in these areas. It is interesting to consider whether the scars below T21 could be related to the 5 other ice-jam events that may have occurred based upon meteorological conditions.
2. Erosive Force of Jams – In observing the effects of the 2003 ice-jam event, it is readily apparent that erosive forces associated with jams and the subsequent release, are dramatically more significant than 100-500 year flood events in the river. According to Alcoa’s analysis, a maximum scour depth of 5 feet was observed in 2003. In contrast to this, it is estimated that a 500-year open flow flood event would only erode the top few millimeters of the Main Channel sediment. To better understand the erosive forces associated with ice jams, Alcoa utilized a series of complicated models that required a large number of assumptions. The results indicated that turbulent flow beneath the ice jam produced much higher effective bottom shear stresses than would be predicted by a more standard transport model such as DynaRICE. The studies also indicated that the turbulent kinetic energy was very sensitive to the assumed geometry at the bottom of the ice jam in relationship to the profile of the river bed. Although this modeling effort has been utilized to design an armored cap for the project, SRMT believes that there is significant uncertainty associated with the understanding of ice jam geometry and resulting turbulent flow beneath the jams. In addition to this concern, it cannot be ruled out that the bottom of the ice jam itself will actually extend into the river sediment resulting in direct physical contact and gouging of the sediment. Certainly the armored cap could not withstand this type of “plowing” force. Although Alcoa maintains that “ice-grounding” did not occur at T16 in the 2003, modeling studies of ice jams (Appendix Q, CCLGR Addendum, April 2009) indicate that it could have occurred. Section 2.1.3 of Appendix Q states that “In the vicinity of the toe, the jam was predicted to be partially grounded at the toe.” This ice-grounding phenomenon is depicted on Figures 2.11 and 2.14.

Cap Placement

3. Sediment Stability Downstream of T21 – As currently envisioned, the PRAP proposes to utilize armored caps above transect T21 to better withstand erosive forces related to ice jams. The caps in this section of the river have a proposed thickness of 25 inches, including an upper layer of gravel/cobbles. Below T21, the proposed cap is 12 inches thick and comprised of a sand/topsoil mixture. In this lower section of the river, Alcoa maintains that sediments are not subject to ice-related impacts and that current velocities are low enough that the sand-size particles within the proposed cap will be stable. SRMT has previously raised the concern that the erosive effects of ice jams may extend below T21. As we have previously indicated, bathymetry analysis suggests that between 0.5 and 1 foot of erosion may have occurred down to transect T34 and lower as a result of the 2003 ice-jam event (Figure ES-3C, A of A Report, July 2012). Although Alcoa has dismissed this data in the past, sediment core data from this lower section of the river indicates that there are periodic high energy events as evidenced by coarse sand and gravel layers intermixed with finer grained silt and clay deposits. These coarser high energy zones, which were observed at cores located in the vicinity of T35, T37, and T46 also contained elevated PCB concentrations. Although Alcoa initially claimed that these deposits may have been related to dredge residuals related to the deepening of the Lower Grasse River, EPA’s consultant (Dr. Dave Richardson, Tetra Tech) supports the position that the sediments have been subject to a “flood event that mobilized sand” and that the “layer post dates the PCB contamination” and is “unlikely due to dredging.” These data are critical since they establish that water velocities in this reach of the river are high enough to mobilize gravel-sized particles. Two cores near T35 contain 40 – 50% gravel. It is also interesting to note that these cores are generally located in the vicinity of tree scars observed at T42, T43, and T49. This evidence raises serious concerns about the site conceptual model and the predicted long-term stability of the proposed caps below T21.
4. As indicated in comment 3 above, SRMT is concerned about sediment stability below T21 because of the presence of sand and gravel layers within several cores collected at T35, T37 and T46. Two of the cores at T35 contain 40-50% gravel, which indicates that water velocities were periodically high enough to transport gravel sized particles downstream of T21. Based on this evidence, it is doubtful that a cap composed of a sand/topsoil mix will be stable. As such SRMT, requests that the PRAP clearly state that enhancements to the cap be required downstream of T21 to address higher energy flows. At a minimum, the enhanced cap should extend between T21 and T46.
5. Need for “Re-opener” Language – All river systems are a dynamic environment that present many challenges for permanent remedial solutions. However, the Lower Grasse River is especially unique due to the relatively frequent occurrence of ice-jam events, its physical setting as a tributary to a major international river, and its importance to the people of Akwesasne. Given the significant uncertainty associated with the conceptual site model for the river and the limitations associated with installing caps through the water column, SRMT feels strongly that very specific language be placed in the PRAP that recognizes these uncertainties and sets the tone for future re-evaluation of the remedy based upon monitoring results. SRMT does not believe that the standard CERCLA requirement for reviews at five-

year intervals is adequate. We believe that monitoring should be conducted at a much more frequent interval and that any significant changes in site conditions be evaluated by the Agencies. If site conditions indicate that the basic assumptions made by Alcoa in developing the remedy are flawed to such an extent that long-term performance is in question, the Record of Decision for the Site should be re-opened.



St. Regis Mohawk Tribe

September 11, 2012

Chief Randy Hart
Chief Ron LaFrance Jr.
Chief Paul O. Thompson
Sub-Chief Shelley Jacobs
Sub-Chief Michael L. Connors
Sub-Chief Eric Thompson

Hand Delivered
Mr. Donal "Del" Laverdure
Assistant Secretary for Indian Affairs (Acting)
Office of the Assistant Secretary
Department of the Interior
1849 C Street, NW, Mail Stop 4141
Washington, DC 20240

Re: St. Regis Mohawk Tribe and Consultation with EPA Regarding Alcoa Superfund Site

Dear Mr. Laverdure:

Enclosed is a letter and briefing memorandum to the Environmental Protection Agency Region 2 regarding the Alcoa Superfund site. The EPA did not have a full briefing of the reservation status of the Grasse River lands from the Tribe or the Department of the Interior and, as a result, the agency has not given proper recognition to the Tribe's interests in the preparation of the remedial plan for the site.

Based on the EPA's understanding that the site is not adjacent to or part of the Tribe's reservation, among other reasons, the EPA has decided in its discretion to give the Tribe's clean up standards "to be considered" treatment, rather than being recognized as "relevant and appropriate" as would be permitted and fully supported under EPA policy.

The St. Regis Mohawk Tribe has requested that EPA consult with the Department regarding the status of the Tribe's lands along the Grasse River, which we understand EPA has never done. We ask the Department to support the Tribe's assertions, as laid out in the attached briefing memorandum, that the land along the river remains within the original reservation boundaries as delineated in the 1796 Treaty with the Seven Nations of Canada, 7 Stat. 55. We attach to this letter, the proposed changes the Tribe would like to see made to the proposed remedial action plan that would give full recognition in a way satisfactory to the Tribe in stating its interest in the river and its resources and the land adjacent.

We would like to set up a meeting with the Department to discuss the EPA's position and our request for EPA to consult with the DOI on this matter. The EPA has set a deadline of September 30, 2012 to publish its proposed remedial action plan. A consultation meeting

Helping Build A Better Tomorrow

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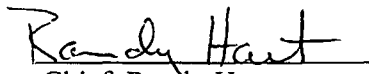
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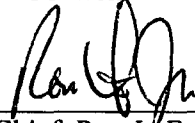


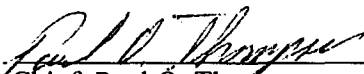
between the Tribe and the EPA is currently scheduled for September 21, 2012. It would be important to have a DOI representative at that meeting. We also hope the DOI can consult with EPA prior to that meeting.

Respectfully,

The Saint Regis Mohawk Tribal Council


Chief, Randy Hart


Chief, Ron LaFrance, Jr.


Chief, Paul O. Thompson

cc:

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Washington, DC 20240



September 11, 2012

VIA Federal Express

Mr. Walter Mugdan, Director
Emergency and Regional Resources Division
Environmental Protection Agency
Region 2
290 Broadway
New York, NY 10007-1866

Re: Alcoa Superfund Site Draft Proposed Remedial Action Plan

Dear Mr. Mugdan:

We are writing on behalf of our client the St. Regis Mohawk Tribe. Our firm represents the Tribe in many matters including its land claim and boundary claims against the State of New York. The Tribe has asked us to respond to the recently provided draft PRAP. The Tribe also asked us to specifically to the Alcoa comments that were provided to the EPA in a February 8, 2010 memorandum from Thomas Walsh to G. Pfeiffer, entitled "Initial Comments on ARAR Selection for the ROD."

Our briefing memorandum is attached this letter. The Tribe has already outlined the issues that it has with the EPA's draft Proposed Plan in its letter of September 7, 2012. This briefing paper provides more specific information and legal analysis of the Tribe's position with respect to the meadow land adjacent to the Grasse River, land in which it holds a reserved treaty interest.

The Tribe has received a copy of the memorandum of Sept 28, 2011 summarizing the meeting between EPA Region 2 and representatives of the Tribe on September 16, 2010. The Tribal Council only learned of the existence of this memorandum and the substance of those discussions when that memorandum was shared with the Tribe in July of this year. The fact that no tribal council member was present at the September 2010 meeting is troubling because we believe that true government-to-government consultation should include elected leaders of the Tribe. We are also puzzled why it took so long for EPA to prepare the memo and for the Tribe to receive it. The Council has concluded that another consultation is appropriate given the importance of the issue and we appreciate that you have scheduled a consultation September 21 in Albany, New York.

The attached briefing memorandum addresses more fully the issues discussed in that meeting and in the Alcoa memo regarding the applicability of the Tribe's sediment cleanup standard as an ARAR. As we have argued throughout, and as more fully addressed in the attached briefing memo, the SRMT claims land on both sides of the River, the meadows

which were specifically set aside and reserved in the Tribe's Treaty of 1796. As the Tribe wrote in the September 7, 2012 letter, Tribal members have traditionally fished in the Grasse River, a traditional fishing site is located near the confluence of the Grasse River and the St. Lawrence River, and some Tribal members live in the meadows. While the EPA has been clear that the Tribe's PCB water quality standard would not apply because it is not as stringent as the federal and state standards, the Tribe has a PCB sediment standard while no other entity does. For these several reasons, the Tribe requests that EPA treat its PCB sediment standards as a relevant and appropriate ARAR.

We expect that we will discuss this briefing memorandum in more detail at the meeting to be held in Albany on September 21, 2012.

Sincerely,



Marsha K. Schmidt

Attorney for the St. Regis Mohawk Tribe

cc: Douglas Fischer, Counsel EPA
Michele Mitchell
Ken Jock
John Privitera
Rich McAllister
David Moran



September 11, 2012

**Saint Regis Mohawk Tribe's Response to Alcoa's
Initial Comments on ARAR Selection for the ROD¹**

I. INTRODUCTION

This memorandum specifically addresses the EPA's conclusions regarding the Tribe's interest in the Grasse River and, based on those conclusions, EPA's failure to apply the Tribe's ARAR as a relevant and appropriate standard. The Tribe recognizes the EPA has proposed the Tribe's standards are to be considered for the remediation of the site and that the EPA is taking the Tribe's standard into account in setting the preliminary remediation goal for the protection of the health of the Mohawk people.

However, the Tribe's view is that the EPA has not fully recognized the Tribe's significant sovereign interest in the river and the Tribe's reservation lands that are adjacent. These interests serve as a clear basis to treat the Tribe's standards as relevant and appropriate.² We understand the EPA was briefed in a Feb. 8, 2010 document entitled "Initial Comments on ARAR Selection for the ROD" ("Comments" herein), which was a response by Alcoa to the Tribe's March 13, 2003 comment letter that its tribal laws should apply to the Site. The Tribe did not respond to those comments but has determined that it must do so for the record.

¹ Prepared on behalf of the Tribe by Hobbs, Straus, Dean & Walker, LLP.

² Because of the complexity of the jurisdictional and land movement issues, the Tribe is not arguing here that its standards are "applicable." However, the facts and legal analysis below support the treatment of the Tribe's standards as relevant and appropriate.

The Tribe also requests that the EPA seek the views of the Department of the Interior who is tasked with protecting tribal lands and resources. The Secretary of the Interior is generally given deference on the determination of tribal sovereignty and land interests and, based on our discussions with the DOI Office of the Solicitor, we understand that EPA Region 2 has failed to contact or otherwise coordinate with the Secretary of the Interior on this question. As you will see below, the Secretary has already taken positions regarding the Tribe's reservation and the interpretation of the *Sherrill* case that is discussed at length in the Alcoa Comments. The Tribe requests that EPA defer to the DOI positions which have also been asserted in litigation by the Department of Justice.

II. Language of Draft PRAP

There are a few passages that the Tribe takes issue with in the draft PRAP but the most erroneous one is found in the draft PRAP, p. 3, which states:

Also, the lower Grasse River is part of a 1796 Treaty with the Seven Nations, by which the Mohawks reserved its resource rights to the meadows on both sides of the lower Grasse River and the rights to fish, collect, hunt and conduct spiritual ceremonies in the Grasse River though the Grasse River is not within the Akwesasne, Mohawk reservation. The lower Grasse River is of significant cultural resource uses of fish, wildlife, and plants to the Mohawks of Akwesasne.

We have several objections to this description, which are more fully addressed below.

But in sum, they are:

1. The 1796 Treaty did not simply reserve "resource rights" to the meadows on both sides of the Grasse River. The Treaty reserved to the Mohawks title and ownership to land on both sides of the river, as well as islands in the river, and those rights appurtenant.

2. While the Grasse River is not "within" the Tribe's undisputed reservation presumably that area referred to in the draft PRAP as the "Akwesasne, Mohawk" reservation, the Grasse

River does flow through reservation land on both sides of the river that was originally set aside for the Tribe in the 1796 Treaty and which remains within the boundaries of that original reservation. The official position of the United States, as asserted by the Justice Department in the Mohawk land claim and in other forums, is that the purchase of the Tribe's reservation land by the State, including those parcels along the river, was illegal under federal law. Further, the U.S. position is that the Tribe's 1796 reservation has never been diminished or disestablished by Congress. There is simply no record of any Act of Congress to approve the State's illegal land purchases, or any other act of Congress that could be construed as diminishing the Tribe's reservation. Thus, the land along the river is tribal reservation land, even though there is a current dispute over title being litigated in the land claim.

3. The Tribe agrees with the EPA's recognition that the Mohawks never ceded fishing, hunting or subsistence rights in the waters historically used by the Tribe and that as such, the Tribe has a continuing right to "fish, collect, hunt and conduct spiritual ceremonies in the Grasse River." These rights are impliedly reserved by treaty since they were never ceded and can only be abrogated by Congress. Contrary to Alcoa's contention, *City of Sherrill* has never been interpreted to allow a State or the federal agency to deny the full exercise of those sovereign rights including the protection of the fishing rights, resources and health of its tribal members.

III. ARGUMENT

A. **Land Along Both Sides of the Grasse River as well as Islands in the River Were Reserved to the Tribe in the 1796 Treaty with the Seven Nations of Canada.**

For hundreds of years, the St. Regis Mohawks have lived along the St. Lawrence River, in what are now Franklin and St. Lawrence Counties, New York. As was true of all lands within the original colonies, settlers pressured the Mohawks to move from these lands but the Tribe

refused to do so. Even so, in the late 1700's non-Indian speculators purported to purchase from the State land that was actually owned and occupied by the Mohawks. The Mohawks protested these purported purchases.

In an effort to set aside land for the Mohawks that would be federally protected from any further encroachment, in a treaty negotiation conducted by the federal government, the State of New York agreed in return for a land cession in New York, to set aside land for the Mohawks as a federal reservation. 1796 Treaty with the Seven Nations of Canada, 7 Stat. 55. Those lands consisted of a six-mile square and other identified areas occupied by the Mohawks. The lands set aside included parcels along the Grasse River. Congress ratified this treaty and since that time, has never enacted any law, which would change the boundary of the 1796 reservation.

The 1796 Treaty, Exh. 1, simply identified the land along the Grasse River as "meadows."

It is therefore agreed ... there shall be reserved to be applied to the use of the Indians of the said village of St. Regis, in like manner as the said tract is to remain reserved, a tract of one mile square at each of the said mills [Massena and Fort Covington Mile Village Squares] and the meadows on both sides of the said Grass River from the said mills thereon, to its confluence with the river St. Lawrence.

The federal government did not survey the meadows after the Treaty. The State made its own determination as to what constituted "meadows" and had a survey conducted in both 1801 and 1845. The 1801 survey was prepared to identify tribal lands so that there was a clear delineation between the tribe's land and the non-Indian settlers. The 1801 Amos Lay map found that the meadows and islands contain 210 acres. Exh. 2.

The "meadows" were once again surveyed in 1845. The 1845 state "treaty," Exh. 3, which purported to purchase the Tribe's land along the river explained that, "Whereas the said St.

Regis Indians own certain lands in the County of St. Lawrence known and distinguished as the Indian Meadows or Grass River, on both sides of the said river or as Islands in the said river" which were reserved in 1796, were to be sold to the state for \$3 per acre, once they were surveyed. The purpose of the 1845 survey was to identify those lands the State intended to purchase from the Mohawks.

According to the Annual Report of the Comptroller, upon the re-survey, the area was found to be 191 acres, more or less. See Exh. 4, Documents of the Assembly of the State of New York, Vol. I, 1846, at Report No. 25, p. 36, Exh. 5, 1845 resurvey map. Once surveyed, the lands were patented by the State to non-Indians between 1846 and 1851.

The State's purchase was not approved under federal law and is being challenged in the pending land claim filed by the Tribe and the United States.³ The United States' position in the land claim is that this purchase was not made in accordance with federal law and is therefore null and void under the Nonintercourse Act. 25 U.S.C. § 177. Alcoa states that the EPA need not determine if this transaction was illegal. See Comments, p. 3. It is true that EPA need not make this determination, but that is because the United States has already come to a conclusion on that score and the official position of the U.S. is that the state "treaties" were illegal under federal

³ *Canadian St. Regis Band of Mohawk Indians v. New York*, Dkt. Nos. 82-cv-783, 82-cv-1114, and 89-cv-829 consolidated, N.D.N.Y. (with U.S. intervention into all cases). Alcoa describes the Tribe's land claim as one where the Tribe is "attempting to re-establish its jurisdiction" over the meadows. See Comments, p. 3, note 1. The land claim is a claim to title and to establish that the transaction by which the State purchased the land was null and void. The issue of title is distinct from jurisdiction and a tribe may still have jurisdiction within the boundaries of its reservation, even if non-Indians hold title. See *Thompson v. Franklin County*, 15 F.3d 245, 250 (2d Cir. 1994)(*Thompson I*). "[T]he mere conveyance of property to non-Indians does not necessarily disestablish the reservation boundaries for jurisdictional purposes." *Id.*, citing *Mattz v. Arnett*, 412 U.S. 481, 497 (1973).

law. The land claim brought by the U.S. claims just that. A map of the approximate areas at issue in the land claim is attached as Exhibit 6.

B. Congress Has Never Disestablished the 1796 Reservation.

The land set aside for the St. Regis Mohawk Tribe in the 1796 Treaty includes the lands known as the Grasse River meadows. Since the land in this area was not legally purchased by the State of New York in 1845, that action did not remove the land from the reservation. There has never been an act of Congress approving the purchases or changing the boundaries of the original reservation.⁴ There is no evidence, and Alcoa has brought forth none, that Congress ratified or otherwise approved the diminishment of the Tribe's reservation.

It is settled law that once set aside, only Congress may disestablish or diminish a reservation. *United States v. Celestine*, 215 U.S. 278 (1909); *Solem v. Bartlett*, 465 U.S. 463 (1984); *DeCoteau v. District County Court*, 420 U.S. 425 (1975); *Seymour v. Superintendent*, 368 U.S. 351 (1962); *Rosebud Sioux Tribe v. Kneip*, 430 U.S. 584 (1977); *Hagen v. Utah*, 510 U.S. 399 (1994); *Cf. City of Sherrill*, 544 U.S. at 216 n.9. Courts are admonished not to "lightly

⁴ Any reliance on the U.S. Geologic Survey map or any other modern map is erroneous since these maps are not definitive. Simply because a map depicts a reservation boundary does not mean it is the "legal boundary." The only legal boundary is the one defined in the Treaty. Courts are reluctant to use maps alone as determinative evidence of reservation diminishment or disestablishment. *See, e.g., Oneida Indian Nation v. City of Sherrill*, 337 F.3d 139, 162 n.20 (2d Cir. 2003) (noting that "the fact that certain . . . maps of the area . . . omit mention of an Oneida reservation in New York State does not conclusively indicate disestablishment."), *rev'd on other grounds and remanded*, 544 U.S. 197 (2005); *Yankton Sioux Tribe v. Gaffey*, 188 F.3d 1010, 1029 n. 11 (8th Cir. 1999) (noting that maps which either refer to the Yankton Sioux Reservation or lack any such reference were found by the Supreme Court in *South Dakota v. Yankton Sioux Tribe* to have "limited interpretive value,"), *cert. denied*, 530 U.S. 1261 (2000); *United States v. S. Pac. Transp. Co.*, 543 F.2d 676, 690 (9th Cir. 1976) (approval of map does not purport to terminate reservation); *Wisconsin v. Stockbridge-Munsee Community*, 366 F.Supp.2d 698, 772 (E.D. Wis. 2004) (refusing to rely on government-created maps in finding that reservation was diminished because "the maps do not reflect any legal analysis of reservation boundaries and, therefore, are of little value in the court's analysis."), *aff'd*, 554 F.3d 657 (7th Cir. 2009).

find diminishment." *Hagen*, 510 U.S. at 411. Thus, under federal law, unless Congress has enacted a law altering the boundaries of a reservation, that boundary remains intact. The Supreme Court in *Solem* affirmed this view, citing to the longstanding rule that, "The first and governing principle is that only Congress can divest a reservation of its land and diminish its boundaries. Once a block of land is set aside for an Indian reservation and no matter what happens to the title of individual plots within the area, the entire block retains its reservation status until Congress explicitly indicates otherwise." 465 U.S. at 470; *Mattz v. Arnett*, 412 U.S. 481 (1973) (holding that the mere fact that a reservation has been opened to settlement does not mean that it has been diminished).

Notably, the Supreme Court in *City of Sherrill v. Oneida Indian Nation*, 544 U.S. 197 (2005) ("*City of Sherrill*" or "*Sherrill*" hereafter), recognized this principle affirming that only Congress can diminish a reservation. 544 U.S. at 216, n.9. The *Sherrill* Court relied on the distinction between reservation status and land ownership reflected in the boundary cases, i.e., land ownership does not necessarily decide the reservation status or the question of sovereignty. The Second Circuit recently affirmed that ruling, holding that the Oneida Nation's reservation had not been disestablished and the Supreme Court's decision in *Sherrill* "did not upset that determination." *Oneida Indian Nation v. Madison County*, 665 F.3d 408, 444 (2d Cir. 2011), *rehearing denied* (2012).

Based on its own analysis, however, Alcoa asserts with no support whatsoever, that the Tribe's PBC clean up standard, as enacted by Tribal Resolution in 1989, could not apply to the Grasse River meadows because these areas "are not currently part of the reservation." See Comments, p. 6. To the contrary, the reservation and boundary for the Grasse River meadow land has never been diminished and those lands remain within the original reservation

boundaries. Alcoa has not presented any evidence to the contrary and there is none. Further, the United States has already taken a position as to whether the 1796 Reservation was diminished or disestablished and it has asserted it was not.⁵

Alcoa argues that, by its own terms, the 1989 Resolution does not apply because it only applies only to the Tribe's Reservation. Comments, p. 6. That is true. The Tribe's resolution applies to "the Saint Regis Mohawk Reservation." The only such reservation is that created by the 1796 Treaty.

Alcoa argues similarly that the resolution is not relevant or appropriate because the resolution only applies to the "the quality of the reservation environment" and the reservation is not on the Grasse River. Comments, p. 9. Additionally, in discussing whether the Tribe's standards are applicable to the Site, Alcoa argues the Site is not on "or contiguous to the Akwesasne Reservation." Comments, p. 9.

All of the Alcoa assertions fall into the same fallacy—that the Grasse River parcels are not part of the reservation. In fact, those parcels are within the boundaries of the lands reserved by the 1796 Treaty that has never been diminished. Tribal members own land and live along the river in those land claim areas. Thus, the Site is contiguous to the Tribe's 1796 reservation and its members may be impacted by the remedial plan. Until Alcoa can produce evidence that Congress has changed the terms of the treaty or changed the reservation status of those lands, any assertion to the contrary is false and should be given no weight.

⁵ See Exh. 7, Excerpts from *U.S. v. Wilson*, No. 11-915, Brief for Appellant United States (2nd Cir. filed July 11, 2011)(in regard to Hogsburg Triangle land claim area); See also Exh. 8, Excerpt from Decision of Regional Director, dated August 17, 2011, (finding the reservation has not been diminished in regard to Fort Covington land claim area). This decision is now on appeal to the Interior Board of Indian Appeals in *State of New York v. Acting Eastern Regional Director*, Dkt. Nos. 12-006, 12-010.

C. The Question of Whether the Tribe has Jurisdiction over the Grasse River Meadows for the Purposes of Exercising its Sovereign Rights to Protect the Health of its Reservation and its Members Was Not Addressed in *City of Sherrill*.

In a related argument, Alcoa relies on the Supreme Court's ruling in *City of Sherrill* to assert that the only way for the Tribe to have "sovereignty" over the Grasse River meadows and for the Tribe's clean up standard to apply is for the Tribe to take the land into trust. Comments, p. 5. To the contrary, the United States has argued in several different forums that *City of Sherrill* does not preclude the United States from recognizing a tribe's governmental jurisdiction over its original reservation if it has never been disestablished.

In *Sherrill*, the Tribe asserted its sovereignty over land located within its reservation boundaries and which it had recently acquired. It asked the Court to hold, as a remedy against the imposition of property taxes by the local and state government (and as a remedy for its land claim), that its lands were not subject to state jurisdiction. *See Sherrill*, 544 U.S. at 221. The United States has argued correctly that *Sherrill* held the Oneida Nation's ability to assert its sovereignty was impaired for equitable reasons, which precluded the Oneida Nation from the *judicial remedy* it sought. But the Supreme Court did not hold the reservation itself was disestablished or diminished. Nor did the Court hold that the Oneidas lacked governmental jurisdiction over its members within its original reservation or even mention the extent of the Tribe's general government authority over the reservation in any other context.⁶

⁶ See Exh. 9, Excerpts from Brief filed by the United States in *State of New York v. Salazar*, Civil Action No. 6:08-cv-00644-LEK-DEP (N.D.N.Y.) filed Jan. 30, 2012.

Similarly, the United States recognizes the St. Regis Mohawk Tribe as having governmental jurisdiction over its reservation lands and has recognized this jurisdiction since the Seven Nations of Canada Treaty of May 31, 1796, 7 Stat. 55, set aside the six-square mile Reservation and other lands.⁷ Nothing in the *City of Sherrill* decision disturbs the applicable federal Indian law principle that the St. Regis Mohawk Tribe has governmental jurisdiction over its members within its entire reservation.⁸ The Tribe continues to hold governmental authority over its reservation, including the Grasse River parcels, even if that authority does not entitle the Tribe to certain remedies, which are now precluded in the *City of Sherrill* decision.

The limits of *Sherrill* have also been confirmed by the Second Circuit in *County of Madison v. Oneida Indian Nation*, 665 F.3d 408 (2d Cir. 2011) where the Court rejected an argument that the decision in *Sherrill* resulted in an abrogation of sovereign immunity. The Circuit held that those same lands at issue in *Sherrill* could not be foreclosed upon because the Oneida Nation retained its absolute sovereign immunity from suit and that immunity precluded the foreclosure. While the Supreme Court later vacated this ruling for procedural reasons (the Oneida Nation later waived its immunity), a federal district court has reiterated this principle in a case concerning the Cayuga Nation. See Exh. 11, *Cayuga Indian Nation v. Seneca County of New York*, 2012 WL 3597761 (W.D.N.Y. Aug. 20, 2012).

Given these interpretations, it would be a stretch to suggest that the *Sherrill* case somehow resulted in the Tribe being barred from exercising or protecting its Treaty rights or

⁷ See Exh. 10, Excerpts from Brief filed by the Department of the Interior in *State of New York v. Acting Eastern Regional Director*, IBIA Dkt.,12-006 and 12-010, filed June 15, 2012.

⁸ The Tribe has the inherent sovereign and governmental authority to protect the health and welfare of the Tribe and its members. See *Montana v. United States*, 450 U.S. 544, 566 (1981); *Wisconsin v. E.P.A.*, 266 F.3d 741 (7th Cir. 2001).

from protecting the health of its members on its original reservation land. Certainly, *Sherrill* has never been read and cannot be read as diminishing the Tribe's reserved Treaty rights, something only Congress can do. Alcoa's broad reading of *Sherrill* is not supported by the ruling itself and is not one that has been adopted by the United States in assessing the extent of tribal governmental jurisdiction.

D. The Mohawks Never Ceded Fishing Rights in the Waters Historically Used by the Mohawks.

While EPA has recognized the Tribe's fishing and resource rights in the draft PRAP, Alcoa has presented arguments in the record that contest the existence of these rights.

The Mohawks have fished in the waters of the St. Lawrence River and other rivers in and around area, including the Grasse River, since its settlement by the Mohawks. At no time during the negotiations of the 1796 treaty did the Mohawks or the State representatives discuss the issue of whether the Mohawks could continue to fish in the rivers. See discussions detailed in Exh. 12, Hough, F.B., A History of St. Lawrence and Franklin Counties, New York, p. 128-146 (1853).

Alcoa claims that the 1796 Treaty did not express an intention to provide the Tribe with either "fishing rights or sovereign jurisdiction" on the Grasse River because the Treaty mentions that the Tribe uses the meadows for hay and the mile square mill sites for the mill. Comments, p. 6. While the Treaty preamble does mention these uses, the actual land set aside does not limit the land use in any way. Rather, the treaty language setting aside the Grasse River lands does not limit its use, but is unconditional--the lands are to be applied to the use of the Mohawks and treated in the same manner as the six-mile square. The Treaty expressly states, "there shall be reserved to be applied to the use of the Indians of the said village of St. Regis in a like manner as

the said tract [six-mile square] is to remain reserved the meadows on both sides of the said Grass River from the said mills thereon, to its confluence with the river St. Lawrence."

In no instance does the Treaty cede fishing or any other resource rights for the land. The fact that the Treaty does not mention fishing rights means the Tribe had no intention of ceding them.⁹ In fact, the Mohawks were so sure of their rights at the time of the Treaty, that in 1796, following the Treaty with the Seven Nations, the St. Regis Mohawks entered into 999 year leases for fourteen islands in the St. Lawrence River. "The lease explicitly reserved fishing rights to the St. Regis Mohawk Indians, notably, for a point on Long Sault Island, and in all other areas and at all times when the lessees were not present" See Exh. 13 (Excerpts from Declaration of Whitely, filed in the Mohawk Land Claim).

Fishing continued over generations. In an 1845 report by the Canadian Indian Department, it was noted that the Indians frequently fished the Thousand Islands. Exh. 13, Whitely Dec., p. 32. The 1890 Census also noted that, "fishing still occupies a few families of the Saint Regis at the mouth of the Raquette River." *Id.* at 39. Various news articles establish the continuing exercise of fishing rights in the adjacent rivers. In 1885, 1886 and 1889, it was reported that Indians were using seine nets for fishing. Exh. 14. In a feature news article from the 1890's, the reporter noted that, "Fishing is the occupation of quite a number. Great eels are caught and splendid sturgeon, whole even the fast vanishing muskellunge is still from time to time the prize of the more fortunate." Exh. 13, Whiteley Dec., p. 41.

Historically, fishing in these waters has always been contested. Protests over Indian rights were ongoing from the 1880's to the 1930's. Exh. 13, Whiteley Dec., p. 64-73. In an 1890

⁹ Alcoa takes the position that "exclusive fishing rights" cannot be implied. Comments, p. 6. The Mohawks are not asserting exclusive rights and it is not seeking to regulate the fishing rights of non-members. Therefore, the case cited by Alcoa is inapposite.

census report, it was remarked that "The Indians claims that their fishing rights under formal treaties can not be set aside by state statutes." *Id.* at 33. Mohawk fishermen resisted the application of state law, including being jailed over their assertion of fishing rights. Exh. 13, Whitely Dec., p. 32. In 1901, the Mohawks succeeded in establishing their rights under Treaty. Three Mohawks were arrested for illegal fishing and while they were originally convicted, that conviction was overturned on appeal. The State court appeal judge held that the Indians had a right to fish under their Treaty and dismissed the charges. Exhs. 14 and 15.

The exercise of fishing rights has continued to the present and has never been abandoned or ceded by the Mohawks. In fact, there is currently pending a case in state court in which a tribal member is asserting an unfettered Treaty right to fish in waters adjacent to the reservation. *See People v. Roger Thomas*, County Clerk Index No. 20904 (on appeal).

Since the Mohawks lived for hundreds of years along the St. Lawrence in and around the Village of St. Regis, the Indians would have assumed that the reservation set aside by the 1796 treaty, being adjacent to the river, included the continuing right to fish in the river as they had always done. The Mohawks would never have ceded that important right without doing so explicitly and the treaty cannot be construed otherwise.

1. The Mohawks Fishing Rights Were Reserved by Treaty.

Treaties must be interpreted according to the Indian canon of construction—the treaty must be construed according to the terms as the Indians would have understood them and ambiguous terms must be resolved in favor of the Indians. Worcester v. Georgia, 31 U.S. 515, 581 (1832); Jones v. Meehan, 175 U.S. 1, 10-11 (1889); Choctaw Nation of Indians v. United States, 381 U.S. 423, 431-432 (1943); United States v Winans, 198 U.S. 371, 380-381 (1905); Winters v. United States, 207 U.S. 564, 576 (1908).

Aboriginal rights to hunt and fish may be expressly or impliedly reserved in a treaty. Reservation by implication occurs when fishing is necessary to the Indians' way of life. For example, in Colville Confederated Tribes v. Walton, 647 F.2d 42, 47-48 and n. 10 (9th Cir. 1981), the Court found that because the Colville traditionally fished and it was of economic and religious importance, the reservation of the Tribe's access to fishing grounds was implied in the treaty.

In United States v. Michigan, 471 F.Supp. 192, 259 (W.D. Mich. 1979), 653 F.2d 277 (6th Cir.), cert denied, 454 U.S. 1124 (1981), the court held that because Indians were heavily dependent upon fish as a food source and for their livelihood, they would not have relinquished it without doing so explicitly. As such, the right to hunt and fish was impliedly reserved. See also Alaska Pacific Fisheries v. United States, 248 U.S. 78 (1918)(exclusive right to fish implied when necessary for self-sustaining community).

Similarly, in People v. Jondreau, 384 Mich. 539 (1971), the Supreme Court of Michigan recognized that a treaty included the right to fish in the Great Lakes because the Indians were living on land bordered by the lake and would have assumed that the right to fish was included with land set aside for them along that water. See State v. Edwards, 188 Wash. 467, 472 (1936)(continuous use of tide lands has demonstrated understanding of treaty language); Mille Lacs Band of Chippewa Indians v. State of Minnesota, 952 F. Supp. 1362, 1375 (D. Minn. 1997)(Bands would not have understood that they could not fish on a boundary lake outside of ceded territory) aff'd, Minnesota v. Mille Lacs Band of Chippewa Indians, 526 U.S. 172, 196 (1999)(interpret treaty to include the "practical construction" adopted by the parties.)

As such, the right to fish in waters that bound the reservation lands was impliedly reserved by the 1796 treaty. In fact, the history presented above shows the Mohawks have long understood their rights had been reserved and never ceded in the 1796 Treaty.

2. In Order to Effectuate the Purpose of the Treaty, the Right to Fish in Adjacent Waters Must be Included in the Treaty.

Courts must construe a treaty in a way to reserve to the tribe all rights necessary to effectuate the purpose of the Treaty. Grand Traverse Band of Ottawa and Chippewa Indians, 141 F.3d 635, 639 (6th Cir. 1998)(citations omitted). In so doing, the purpose of creating the reservation must be carried out in interpreting rights, such as hunting and fishing. Winans, supra. As explained in Menominee Tribe of Indians v. United States, 391 U.S. 404, 406 (1968) "Nothing was said in the 1854 treaty about hunting and fishing rights. Yet we agree with the Court of Claims that the language 'to be held as Indian lands are held' includes the right to fish and to hunt. ... The essence of the Treaty of Wolf River was that the Indians were authorized to maintain on the new lands ceded to them as a reservation their way of life which included hunting and fishing."

In assessing the purpose for creating the reservation, the stated intention of the 1796 treaty was to set aside a large tract of land and accompanying meadows "to be applied to the use of the Indians of St. Regis" and "in the same manner" as the larger six mile square. There are no restrictions on the use of the land. Generally, a set aside of land to be used as the Indians would normally have done includes the right to hunt and fish, particularly where, as here, the land which has been set aside abuts traditional fishing grounds. Colville Confederated Tribes v. Walton, supra; People v. Jondreau, supra; Mille Lacs Band of Chippewa Indians v. State of Minnesota, supra.

In entering into the 1796 Treaty, the St. Regis Indians sought to settle a claim to land in order to have an area in which to live without interference from the State. Since the Mohawks traditionally fished the rivers for economic and subsistence purposes, there can be no doubt that the preservation of that right to fish in the waters adjacent to the reservation was necessary to continue the Mohawk way of life. If that right was exercised without question on the six-mile square, it must be similarly permitted in the same manner on the waters adjacent to the meadows and other land set aside along the Grasse River.

E. The Tribe's Sediment Standard is Relevant and Appropriate Under EPA Regulations and Policy.

Alcoa makes a wholly unsupportable and clearly incorrect argument that the standards of Indian tribes cannot be considered ARARs. See Section C.1 of the Comments. EPA has established by regulation and policy that tribal standards may be identified as ARARs applicable to a Superfund site.

The EPA acknowledges that there is no federal or state PCB sediment clean up standard. The only standard that may apply to the Site is that adopted by the SRMT. The SRMT Resolution Number 89-19 states that Tribe's PCB cleanup standards apply to the soils, lands, vegetation, air, sediment, surface waters of the Saint Regis Mohawk Reservation. These SRMT PCB sediment standards are a part of the Tribe's water quality standards, which have been approved by EPA. After EPA granted "treatment as a state" status to the Tribe under the Clean Water Act, by letter dated Sept. 14, 2007, EPA approved the water quality standards promulgated by the Tribe. The standards approved by EPA include a standard for PCBs in

sediments, which is 0.1 mg/kg.¹⁰ The SMRT water quality standards specifically state: "The Tribal Water Quality Standards apply to all Tribal Surface Waters, that is, all surface waters within the exterior boundaries of the Saint Regis Mohawk Territory."

Both of these tribal laws apply to the Tribe's reservation. As established above, the reserved Saint Regis Mohawk Territory includes the Grasse River meadows. Contrary to Alcoa's assertion, the SRMT is not asserting that its PCB sediment standard is an ARAR simply because the Site is "upstream" of the Akwesasne Reservation. Rather, the Tribe asserts that its PCB sediment standards are relevant and appropriate requirements for the cleanup of the Grasse River sediments because the Tribe's reservation bounds both sides of the Grasse River and the Tribe has treaty rights in the River's resources. In protecting those interests, the Tribe has adopted sediment clean up standards that are relevant and appropriate.

Section 121(d)(2) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC 9621(d)(2), and the National Contingency Plan of 1990 (NCP) establish that on-site remedial actions must attain (or waive) Federal and more stringent State "applicable or relevant and appropriate requirements" (ARARs) of environmental laws upon completion of the remedial action. The NCP defines "applicable" and "relevant and appropriate" in 40 CFR § 300.5. An "applicable" requirement is defined as a cleanup standard promulgated by a government agency, which is enforceable and within the jurisdiction of the issuing agency. If a standard is not directly applicable, the standard may still be a "relevant appropriate requirement," which the NCP defines as promulgated standards that "address problems or

¹⁰ The Tribe acknowledges that in its 2003 decision on the treatment of the Tribe as a state, the EPA reserved for a future time whether the Tribe's water quality standards applied to the entire reservation, even that area claimed by the Tribe and which is part of the original reservation. Thus, the Tribe has never stated it does not claim that area is under its laws, simply that it was not seeking TAS status for those lands at that time.

situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site." See 40 CFR § 300.5.

In the 1990 NCP, EPA interpreted that section 121 of CERCLA to mean that it is appropriate to treat Indian tribes as states for the purpose of identifying ARARs. The 1990 amendments to the National Contingency Plan clarified that properly promulgated tribal standards may be treated as ARARs consistently with State requirements. The preamble to the NCP at 55 FR 8741 states: "EPA believes, as a matter of policy, that it is similarly appropriate to treat Indian tribes as states for the purpose of identifying ARARs under section 121(d)(2)." In a July 1991 publication entitled "ARARs Q's & A's," OSWER 9234.201/FS-A, Q7 asks: "Are environmental standards and requirements of Indian Tribes potential ARARs?" The answer provided is: "Yes." In a more recent EPA guidance entitled "Contaminated Sediment Remediation Guidance for Hazardous Waste Sites," OSWER 9355.0-85, at Sec. 3.3 EPA writes: "Also, the preamble to the final NCP (55 FR 8741) states that, as a matter of policy, it is appropriate to treat Indian tribes as states for the purpose of identifying ARARs."

The Tribe's standards fit the NCP definition of relevant and appropriate standards, which are those that "address problems or situations sufficiently similar to those encountered at the CERCLA site that their use is well suited to the particular site." See 40 CFR § 300.5. The Tribe adopted PCB standards to address pollution problems encountered in its reservation waters. The Tribe's standard was promulgated at a level designed to minimize the accumulation of PCBs in fish tissue so that Tribal members can consume the quantities of fish as they have traditionally. The Tribe's sediment standards are relevant and appropriate for the cleanup of the sediments in the bed and banks of the Grasse River because the Mohawk use of the Grasse River is very similar to member use of "Akwesasne Reservation" waters.

For example, Tribal members own lands on the Grasse River meadows over which the Tribe has jurisdiction and which may be impacted by any remediation. The Mohawk people have long been heavily dependent upon fish as a food source and for their livelihood, and have traditionally fished the Grasse River. There is a great deal of information, as outlined above, showing that the Grasse River has been fished by SRMT members for hundreds of years. Moreover, the Grasse River must be used to access the meadows of the Reservation and other lands, which were described in the 1796 Treaty. Tribal members have long-used a location near the confluence of the Grasse River and the St. Lawrence Seaway as a fishing spot. There is ample evidence that those tribal fishers who use the Grasse River are at risk from consuming fish whose tissue is contaminated with PCBs that are in the contaminated sediments of the River. Since there are no other PCB sediment cleanup standards, the Tribe's standards are relevant and appropriate for cleanup decisions regarding Grasse River sediments.

In Section C.2 of its comments, Alcoa argues that the SRMT sediment clean-up standard is not "Applicable" to the Site. Alcoa again makes the incorrect argument that the Tribe's standards only are in effect within the Akwesasne Reservation limiting that to the undisputed Reservation recognized by the State. As already discussed, the Tribe's position, consistent with that of DOJ and DOI, is that the St. Regis Mohawk Reservation includes all lands that were reserved by the 1796 Treaty.

In addition, although the Grasse River, as it flowed in 1796, was not included in the reservation, there is a possibility that the River has changed course in some way as the Grasse River was deepened or when the water works for the St. Lawrence Seaway were constructed. We understand that the river boundaries may have moved over time, and that certain islands in the Grasse River that were reserved have since been covered by water. This movement is indicated,

for instance, in a comparison of the 1801 map with a current satellite image of the confluence of the Grasse River and the S. Lawrence. See Exh. 16. A small island identified as "Fishery Island" on the 1801 map is no longer in that area. The movement is also indicated by the change in acreage between the 1801 and 1845 survey. Compare Exhs. 2 and 5.

At this time, the Tribe is not asserting that any part of the bed of the Grasse River is within the boundaries of its reservation, although the Tribe does not concede that the standards are not "applicable." Specifically, it may be that the rules of water law could have effect to show that portions of the Grasse River actually flow over land that was reserved for the SRMT. Black's Law Dictionary defines "avulsion" as "A sudden and perceptible loss or addition of land by the action of water, or a sudden change in the bed or course of a stream." The definition goes on to state "if a stream from any cause, naturally or artificial, suddenly leaves its old bed and forms a new one by the process known as 'avulsion,' the resulting change of channel works no change of boundary" The federal government has never surveyed the Tribe's reservation along the Grasse River and we are not aware of any recent survey of the River channel that could be compared with earlier surveys of the River channel to determine whether an avulsive change has moved the channel so that surface waters of the Grasse River now flow over land reserved in the meadows.

Even if it remains unsettled as to whether the SRMT PCB Sediment standard is "applicable" to the bed of the Grasse River, at the very least the Tribe's PCB sediment standard must be recognized as a relevant and appropriate requirement for the cleanup of the Grasse River sediments. In the draft Proposed Plan, EPA agrees with the Tribe that Tribal members are at risk from consuming fish captured in the Grasse River. As stated in the draft Proposed Plan, "EPA is taking [the SRMT PCB sediment standards] into consideration by establishing a more stringent

fish tissue level to be reached as a PRG for the protection of the Mohawk human health." Given the Tribe's significant interest in protecting the health of Mohawks, the protective water quality standards established by the SRMT for its members who consume fish is clearly a relevant and appropriate standard for the cleanup of the Grasse River.

The Tribe has attached hereto an edited draft PRAP so that the EPA can consider the specific changes sought by the Tribe. We recognize that the Tribe's PCB sediment standard would be difficult, if not impossible, to meet in the Grasse River. Therefore, it may be necessary for EPA to decide that it is technically impracticable to achieve the Tribe's PCB sediment standards. The draft Proposed Plan already includes technical impracticability waivers for two New York State standards. The Tribe would like the Grasse River sediments to be cleaned to meet the Tribe's standards, and for the cleanup to allow for unrestricted fishing in those waters. However, we recognize that may not happen in the near future. We can accept an EPA decision that would waive the Tribe's sediment standard as an ARAR based technical impracticability. The principle that is important to the Tribe is for the EPA to recognize that the Tribe's validly promulgated and EPA-approved PCB sediment standard is an ARAR at the Grasse River Superfund Site, as a relevant and appropriate standard.

List of Exhibits

- Exhibit 1 - 1796 Treaty with the Seven Nations of Canada, 7 Stat. 55.
- Exhibit 2 - 1801 Survey of Meadows by Amos Lay
- Exhibit 3 - 1845 State Purchase of Grasse River Land
- Exhibit 4 - Documents of the Assembly of the State of New York, Vol. I, 1846, Report No. 25
- Exhibit 5 - 1845 resurvey map
- Exhibit 6 - Map of Land Claim Areas, provided to federal district court at oral argument in land claim case, June 2011
- Exhibit 7 - Excerpts from *U.S. v. Wilson*, No. 11-915, Brief for Appellant United States (2nd Cir. filed July 11, 2011)
- Exhibit 8 - Excerpt from Decision of Regional Director, dated August 17, 2011
- Exhibit 9 - Excerpts from Brief filed by the United States in *State of New York v. Salazar*, Civil Action No. 6:08-cv-00644-LEK-DEP (N.D.N.Y.) filed Jan. 30, 2012.
- Exhibit 10 - Excerpts from Brief filed by the Department of the Interior in *State of New York v. Acting Eastern Regional Director*, IBIA Dkt., 12-006 and 12-010, filed June 15, 2012.
- Exhibit 11 - *Cayuga Indian Nation v. Seneca County of New York*, 2012 WL 3597761 (W.D.N.Y. Aug. 20, 2012).
- Exhibit 12 - Hough, F.B., *A History of St. Lawrence and Franklin Counties, New York*, p. 128-146 (1853).
- Exhibit 13 - Excerpts from Declaration of Peter Whitely, filed in the Mohawk Land Claim
- Exhibit 14 - News Articles about fishing cases
- Exhibit 15 - News articles about fishing cases
- Exhibit 16 - Satellite image of Grasse River



Saint Regis Mohawk Tribe

Environment Division

Ken Jock,
Director

September 20, 2012

Mr. Walter Mugdan, Director
United States Environmental Protection Agency
Region 2 – Emergency and Remedial Response Division
290 Broadway, 16th Floor
New York, New York 10007-1866

Re: Grasse River Superfund Site
Remediation Alternatives Analysis

She:kon/Greetings Mr. Mugdan:

As you are aware, the St. Regis Mohawk Tribe (SRMT) previously provided you comments on EPA's August 2012 Draft PRAP for the Grasse River Site. In that letter (dated September 7, 2012), we expressed our concern about EPA's preferred remedy (Alternative 6), which would include dredging of the sediment located in the Near Shore and capping of the Main Channel. Since this proposed remedy only permanently removes about 7% of the impacted sediment in the project site and the river is subject to unpredictable ice scour events, SRMT believes that the selected remedy must include dredging of the Main Channel, such as Alternative 9. Without Main Channel dredging, the vast majority of PCB impacted sediment will remain in the river and be subject to potential remobilization from future ice scour events. While Alcoa has proposed an armored cap to resist ice scour, SRMT believes that this only provides a false sense of security. The ice scour events are not well understood and unpredictable. The 2003 ice jam at transect T16 resulted in the mobilization of 32,000 cy of sediment in a single, dynamic event that most likely occurred in only a few hours. Scour depths of up to 5 feet were measured and sediment was transported at least 4,000 feet downstream. While Alcoa has presented a conceptual design for an armored cap to protect against ice erosion, SRMT is doubtful that this cap can be placed effectively through water depths that can reach 20 ft. or greater. Nor was it conclusively established that the armored cap will withstand the extreme erosive forces associated with an ice jam. Because of this, it is only prudent to remove as much sediment as possible from the Main Channel to minimize recontamination and future releases of PCBs to the water column and fish.

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While we recognize that Main Channel dredging will not be easy or inexpensive, we believe that it provides the best long term solution. Certainly the resources of SRMT and the immediate surrounding community are not well served by a remedy that does not include Main Channel dredging. Leaving 93% of the PCB sediment in the river presents a significant future risk of recontamination that would require additional site characterization, engineering evaluation, and further remediation. The monetary cost of such activities is difficult to quantify and was not considered by Alcoa or EPA.

In addition to the need for Main Channel dredging, SRMT also believes that the capping design below transect T21 should be improved. As presented in our previous correspondence to you, there is evidence that sediment is not stable throughout this entire section of the river. Below T21, Alcoa has proposed to utilize a 12-inch thick cap composed of a sand/topsoil mixture. Since sediment cores indicate that coarse grain deposits are present to at least transect T46, SRMT believes that the proposed cap design should be enhanced wherever dredging does not occur under Alternative 9 to mitigate episodic high energy events. Although Alcoa should be responsible for completing a thorough engineering evaluation in this area, we recommend that at least a six-inch thick gravel layer be placed on top of the 12-inch sand/topsoil cap below T21. It appears that this cap enhancement should extend at least to transect T46, but additional sediment cores should be collected to more clearly establish a downstream limit.

SRMT prefers Alternative 9 rather than Alternative 6 and we believe that it offers several advantages.

1. While Alternative 9 will not remove all of the PCB impacted sediment from the lower river, it will result in a five-fold increase in source removal compared to Alternative 6. Most importantly, nearly 50% of the impacted sediment in the Main Channel upstream of T21, which is most likely to be affected by ice scour, will be removed.
2. While Alternative 9 will still require armored capping, it will be less reliant on this measure since significant Main Channel sediment removal would occur with Alternative 9 but not Alternative 6. As EPA is aware, the armored cap relies on a "layer-cake" design comprised of an ideal construction of 6 inches of sand/topsoil, 6 inches of gravel, and 13 inches of stone. While uniform construction would be possible in dry conditions, it is not realistic to believe that this layered system could be placed through the water column on an irregular river bottom. As we previously indicated in our September 7th correspondence, only about one-third of the ROPs test area for the armored capping achieved the design thickness. In addition, no cores were collected to establish the thickness and continuity of the lower 6-inch base layer. This finer grained material, comprised of sand/topsoil, is critical to isolate the PCB containing river sediment. Additionally, its integrity could be affected by the impact of dropping 10-inch stones through the water column.

The fact that the design thickness was only partially achieved in the ROPs project is even more of a concern considering that the river bed profile in this area was relatively uniform with a generally consistent water depth of 15 feet. In contrast to this, there are sections immediately below transect T16 where the river bottom is much more irregular and effective armored-cap placement would be even more difficult. Attached are several river bottom profiles in the T16-T17 area that were presented in the "Final Report Remote Sensing Survey, T1 to T38"(OSI, September 2003). As shown on profiles 172-175, water depths can exceed 20 feet and significant irregularities can be present on the river bottom. Main Channel sediments in this section of the river would be subject to dredging under Alternative 9, which is preferred by SRMT.

3. As SRMT indicated in our September 7, 2012 correspondence, the erosive forces associated with ice jams are not well understood and are far greater than high flow (100-500 year) flood events. Analysis performed by Alcoa indicates that the effective bottom shear stress beneath an ice jam increases significantly as the ice layer thickness increases and the water column between the bottom of the ice and the river bed decreases. In addition, Alcoa's model suggested that the base of the ice jam may have actually become partially "grounded" onto the river bottom. With Alternative 6, no Main Channel dredging is proposed and the armored cap will decrease the water column depth by 2 feet after the cap is placed. SRMT is concerned that this decrease in the water column will result in even greater erosive forces beneath future ice jams since there will be less area for the water to pass beneath the jam. In addition, there will be a greater likelihood that the bottom of the ice will contact the sediment causing direct physical scour by the ice. Alternative 9 will reduce this possibility in at least some areas above T21 because they will be subject to Main Channel dredging. Even if an armored cap is required after dredging, the river bed will be deepened first by sediment removal, which should serve to reduce the eventual scour forces beneath future ice jams.
4. Alternative 9 also offers the advantage of Main Channel sediment removal between T27 and T46. As SRMT indicated in our September 7, 2012 correspondence, we are concerned that sediment is not stable in this section of the river based on the existence of gravel lens observed in several cores. Alternative 9 provides for the removal of nearly 375,000 cy of impacted sediment from river reaches between T27-T37 and T43-T46. Some of these areas contain up to 7 feet of PCB impacted sediment (e.g. T33) with PCB concentrations exceeding 1000 ppm (T28).
5. While SRMT recognizes that there were difficulties associated with the Main Channel dredging during the ROPs in 2005, this removal effort was primarily conducted using a horizontal auger hydraulic dredge. Problems were associated with presence of debris, boulders and an irregular river bottom. Although a mechanical dredge was briefly utilized during the ROPs project, limited conclusions were drawn regarding its effectiveness due to the short duration of its work. Because of this and the success of mechanical dredging at recent environmental projects (e.g. Hudson River), it is possible that technology advances

since 2005 may lead to improved dredging performance in the Grasse River. In addition, Alternative 9 includes Main Channel sediment removal in the lower section of the river (T27-T37, T43-T46) where core data indicates that sediments are finer grained. These sediment types should allow more effective removal.

SRMT appreciates your consideration of these comments and we are certainly available to discuss them in the near future.

Sincerely,



Ken Jock

CC: Young Chang, EPA Region 2
Douglas Fischer, EPA Region 2
Pietro Mannino, EPA Region 2
Doug Garbarini, EPA Region 2



ENVIRONMENTAL GROUP, INC.
ENGINEERING, ARCHITECTURE AND SURVEYING, PC

November 29, 2012

Mr. Kenneth Jock
Director of Environment Division
St. Regis Mohawk Tribe
412 State Route 37
Akwasasne, New York 13655

Re: Grasse River Superfund Site
Remediation Alternatives Analysis

Dear Mr. Jock:

Spectra Environmental Group, Inc. (Spectra), has been providing technical consulting services on the Grasse River Superfund Site for the St. Regis Mohawk Tribe (SRMT) since 2002. I have closely studied this river for about 10 years, including the review of environmental site investigation plans, evaluating the nature and extent of PCBs in the river system, studying the dramatic effects of ice-scour events, and assessing potential remedial measures to protect and restore the ecosystem. Based upon my review of the technical record for the Grasse River project and the Environmental Protection Agency's (EPA) Proposed Remediation Plan, the following comments are presented:

Uncertainties with Site Conceptual Model and EPA's Preferred Remedy (Alternative 6).

1. Frequency and Extent of Ice Jams – Prior to the 2003 ice-scour event at transect T16, Alcoa was not aware that ice jams occurred in the river even though they had been studying the river for more than 10 years. Subsequent to this event, research has indicated that 6 jams are believed to have occurred in the past 40-50 years. In addition, meteorologic conditions suggest that 5 other events could have occurred in that time period but no physical evidence confirmed this (Addendum to the CCLGR, April 2009). To better understand the downstream extent of the occurrence of ice jams, Alcoa primarily relied upon physical evidence of tree scars along the edge of the river. As indicated in Figure 4-2 of the CCLGR Addendum, tree scars were observed along the edge of the river as far downstream as transect T49. However, in Alcoa's judgment, it is not believed that tree scars below T16 were related to ice-jam events. In their opinion, these scars were attributable to sheet-ice floes rather than jams based on the lower elevation of the scar. While this is one theory, it is certainly not definitive proof that ice jams don't occur below T16. It may suggest that the magnitude of the jams is less in this section of the river but jams could occur and produce higher erosive forces than currently anticipated. Higher erosive forces would most likely effect caps below T21 since no armoring is proposed in these areas. It is interesting to consider whether the

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scars below T21 could be related to the 5 other ice-jam events that may have occurred based upon meteorologic conditions.

2. **Erosive Force of Ice Jams** – In observing the effects of the 2003 ice-jam event, it is readily apparent that erosive forces associated with ice jams and their subsequent release, are dramatically more significant than 100-500 year flood events in the river. According to Alcoa's analysis, a maximum scour depth of 5 feet was observed in 2003. In contrast to this, it is estimated that a 500-year open flow flood event would only erode the top few millimeters of the Main Channel sediment. To better understand the erosive forces associated with ice jams, Alcoa utilized a series of complicated models that required a large number of assumptions. The results indicated that turbulent flow beneath the ice jam produced much higher effective bottom shear stresses than would be predicted by a more standard transport model such as DynaRICE. The studies also indicated that the turbulent kinetic energy was very sensitive to the assumed geometry at the bottom of the ice jam in relationship to the profile of the river bed. Although this modeling effort has been utilized to design an armored cap for the project, Spectra believes that there is significant uncertainty associated with the understanding of ice jam geometry and resulting turbulent flow beneath the jams. In addition to this concern, it cannot be ruled out that the bottom of the ice jam itself will actually extend into the river sediment resulting in direct physical contact and gouging of the sediment. Certainly the proposed armored cap could not withstand this type of "plowing" force. Although Alcoa maintains that "ice-grounding" did not occur at T16 in the 2003, their own modeling studies of ice jams (Appendix Q, CCLGR Addendum, April 2009) indicate that it could have occurred. Section 2.1.3 of Appendix Q states that "In the vicinity of the toe, the jam was predicted to be partially grounded at the toe." This ice-grounding phenomenon is depicted on Figures 2.11 and 2.14.
3. **Cap Placement** – Based upon previous pilot dredging efforts during the ROPS and NTCRA, it is recognized that dredging in the Main Channel will not always achieve the sediment cleanup objective of 1 ppm at all locations. Because of this, Spectra agrees that a capping component will be necessary in both the Near Shore and Main Channel areas. However, the capping component should generally be considered a "secondary" remedy to be utilized after best efforts have been made to remove the impacted sediment through dredging. Mass removal of contamination from the river is the preferred remedy to reduce risk of future mobilization of PCBs into the environment. There are a number of concerns associated with the wide-scale implementation of cap placement through the water column in a river setting. Included are concerns about the uniformity of cap thickness, stability of the cap in steep-sloped areas, and the ability to place an effective armored cap that would require the "dumping" of cobbles onto a previously placed sand/topsoil layer. Although an armored cap was installed during the ROPS project in 2005, it was difficult to assess its effectiveness since physical samples could not be collected through the armored layer. As indicated on page 47 of the Analysis of Alternatives Report (July 2012), only about 35% of the upstream portion of the armored cap area achieved the design thickness, while only 23% of the downstream cap area achieved the target thickness.

4. **Sediment Stability** – Spectra is concerned about sediment stability below T21 because of the presence of sand and gravel layers within several cores collected at T35, T37 and T46. Two of the cores at T35 contain 40-50% gravel, which indicates that water velocities were periodically high enough to transport gravel sized particles downstream of T21. Based on this evidence, it is doubtful that a cap composed of a sand/topsoil mix will be stable. Spectra concurs with EPA's position in the Proposed Plan that enhancements to the cap be evaluated downstream of T21 to address higher energy flows and that additional engineering improvements be evaluated.

Rationale for Main Channel Sediment Removal

5. **Requirement for Main Channel Dredging** – As indicated in Table 2 of the Proposed Plan, the vast majority of PCB sediment in the Lower Grasse River is present within the Main Channel. While EPA proposes to address these areas by capping alone, this does not go far enough in developing a long-term permanent remedy to reduce the availability of PCBs to biota and water column. The need for additional sediment removal is necessary due to significant uncertainties associated with the site conceptual model and the physical limitations of effectively placing caps through the water column.

Spectra recognizes that sediment dredging in the Main Channel may temporarily cause PCB concentrations to increase in the water column and biota due to resuspension during the dredging program. However, the permanent removal of PCBs from the system should outweigh the short-term risk of this increase. In addition, it is important to recognize that Alcoa's model projections of the future remedy effectiveness (page ES-15, A of A Report, July 2012) does not include potential impacts from an ice-scour event. It also assumes that the capping materials can be successfully placed as designed. These serious shortcomings limit the usefulness of the modeling projections.

6. **Advantages of Main Channel Sediment Removal** – Alternative 9, which includes Main Channel sediment removal, offers several potential advantages compared to EPA's preferred remedy (Alternative 6):
 - a. While Alternative 9 will not remove all of the PCB impacted sediment from the lower river, it will result in a five-fold increase in source removal compared to Alternative 6. Most importantly, nearly 50% of the impacted sediment in the Main Channel upstream of T21, which is most likely to be affected by ice scour, will be removed.
 - b. While Alternative 9 will still require armored capping, it will be less reliant on this measure since significant Main Channel sediment removal would occur with Alternative 9 but not Alternative 6. As EPA is aware, the armored cap relies on a "layer-cake" design comprised of an ideal construction of 6 inches of sand/topsoil, 6 inches of gravel, and 13 inches of stone. While uniform construction would be possible in dry conditions, it is not realistic to believe that this layered system could be placed through the water column on an irregular river bottom. This was demonstrated during the ROPs phase of the project where only about one-third of the test area for the armored capping achieved the design

thickness. In addition, no cores were collected to establish the thickness and continuity of the lower 6-inch base layer. This finer grained material, comprised of sand/topsoil, is critical to isolate the PCB containing river sediment. Additionally, its integrity could be affected by the impact of dropping 10-inch stones through the water column.

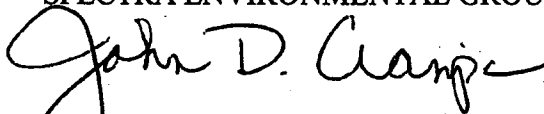
The fact that the design thickness was only partially achieved in the ROPs project is even more of a concern considering that the river bed profile in this area was relatively uniform with a generally consistent water depth of 15 feet. In contrast to this, there are sections immediately below transect T16 where the river bottom is much more irregular and effective armored-cap placement would be even more difficult. Attached are several river bottom profiles in the T16-T17 area that were presented in the "Final Report Remote Sensing Survey, T1 to T38"(OSI, September 2003). As shown on profiles 172-175, water depths can exceed 20 feet and significant irregularities can be present on the river bottom. Main Channel sediments in this section of the river would be subject to dredging under Alternative 9.

- c. Since the erosive forces associated with ice jams are not well understood and are far greater than high-flow (100-500 year) flood events. Analysis performed by Alcoa indicates that the effective bottom shear stress beneath an ice jam increases significantly as the ice layer thickness increases and the water column between the bottom of the ice and the river bed decreases. In addition, Alcoa's model suggested that the base of the ice jam may have actually become partially "grounded" onto the river bottom. With Alternative 6, no Main Channel dredging is proposed and the armored cap will decrease the water column depth by 2 feet after the cap is placed. Spectra is concerned that this decrease in the water column will result in even greater erosive forces beneath future ice jams since there will be less area for the water to pass beneath the jam. In addition, there will be a greater likelihood that the bottom of the ice will contact the sediment causing direct physical scour by the ice. Alternative 9 will reduce this possibility in at least some areas above T21 because they will be subject to Main Channel dredging. Even if an armored cap is required after dredging, the river bed will be deepened first by sediment removal, which should serve to reduce the eventual scour forces beneath future ice jams.
 - d. Alternative 9 also offers the advantage of Main Channel sediment removal between T27 and T46. As previously indicated, Spectra is concerned that sediment is not stable in this section of the river based on the existence of gravel lens observed in several cores. Alternative 9 provides for the removal of nearly 375,000 cy of impacted sediment from river reaches between T27-T37 and T43-T46. Some of these areas contain up to 7 feet of PCB impacted sediment (e.g. T33) with PCB concentrations exceeding 1000 ppm (T28).
7. Prior Dredging Tests - While Spectra recognizes that there were difficulties associated with the Main Channel dredging during the ROPs in 2005, this removal effort was primarily conducted using a horizontal auger hydraulic dredge. Problems were associated with the presence of debris, boulders and an irregular river bottom. Although a mechanical dredge was briefly utilized during the ROPs project, limited conclusions were drawn regarding its effectiveness due to the short duration of its work. Because of this and the success of

mechanical dredging at recent environmental projects (e.g. Hudson River), it is possible that recent technology advances since 2005 may lead to improved dredging performance in the Grasse River. In addition, Alternative 9 includes Main Channel sediment removal in the lower section of the river (T27-T37, T43-T46) where core data indicates that sediments are finer grained. These sediment types should allow more effective removal.

Yours truly,

SPECTRA ENVIRONMENTAL GROUP, INC.



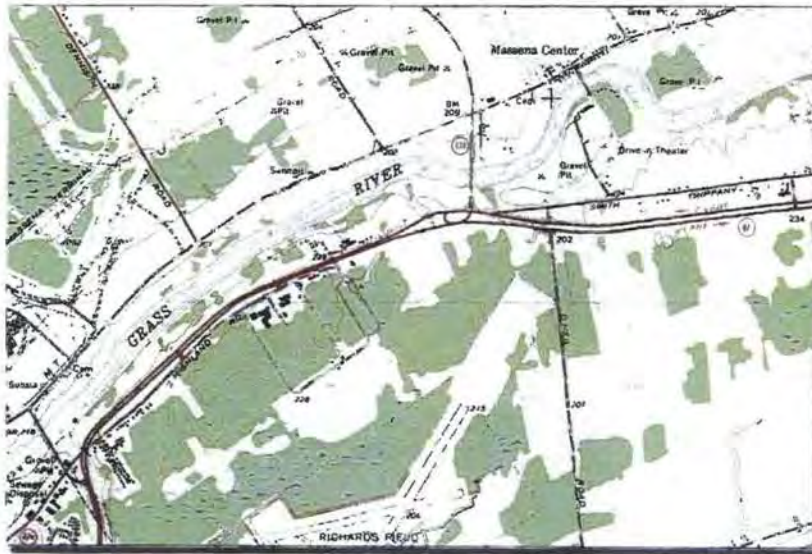
John D. Ciampa

Director of Environmental Remediation Group

JDC/em

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Final Report
Remote Sensing Survey
Grass River Investigation
T1 to T38
Massena, New York



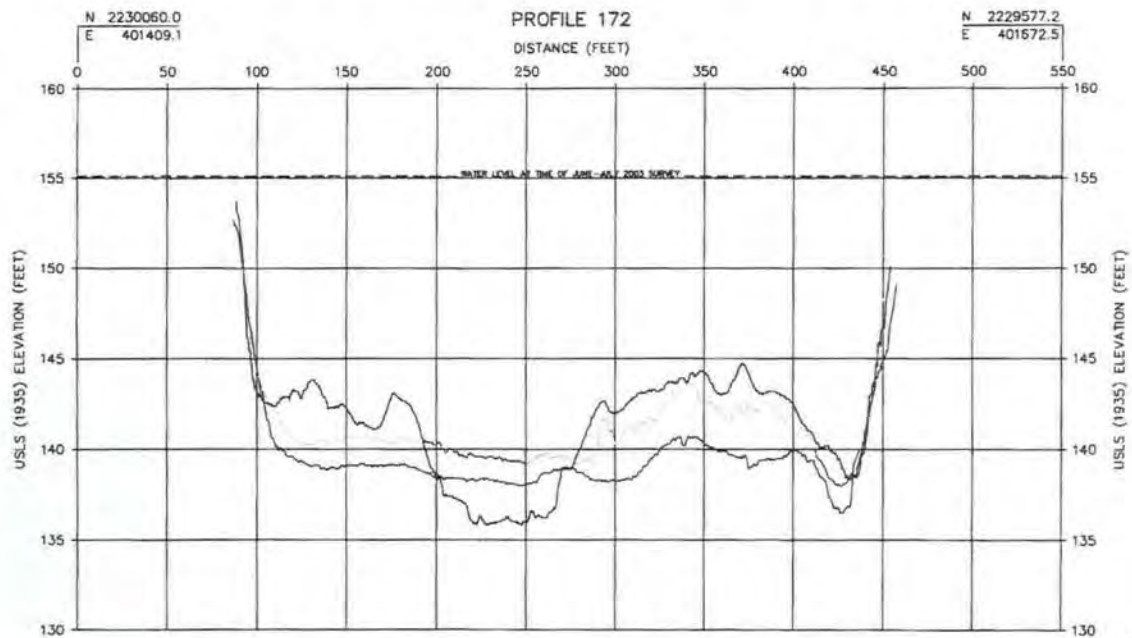
OSI Report #03ES043
Book 2 of 3
2 September 2003

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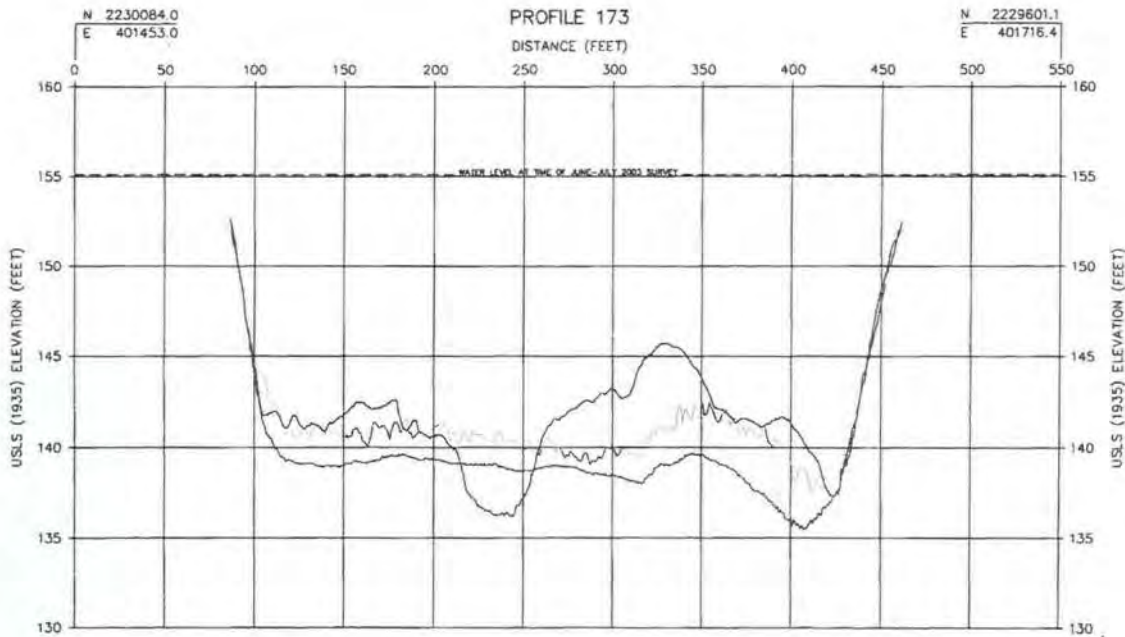
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91 Sheffield Street
Old Saybrook, CT 06475



LEGEND:

- JUNE - JULY 2003 SURVEY — JULY 2001 SURVEY
- OCTOBER 2001 SURVEY

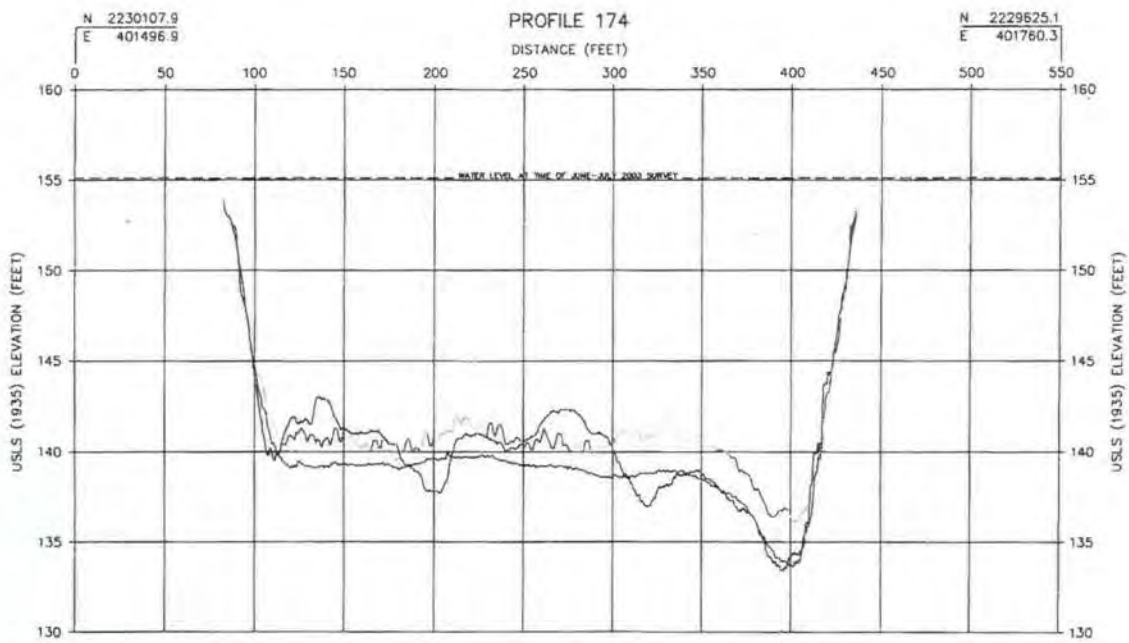




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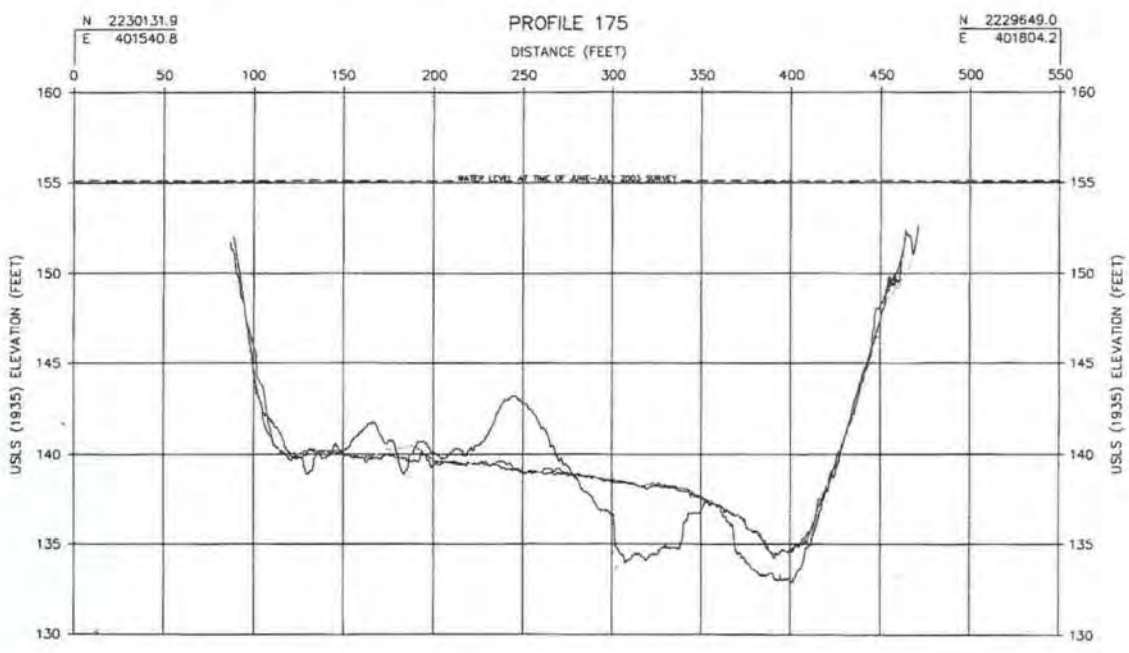




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- - - OCTOBER 2001 SURVEY





LEGEND:

- JUNE - JULY 2003 SURVEY - - - JULY 2001 SURVEY
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SLETC comment letter re: Grasse River Proposed Plan
Barbara Tarbell

to:

Young Chang, Pietro Mannino
11/29/2012 04:06 PM

Cc:

"Mark Barash", anne_secord, "Lisa Rosman - NOAA Federal", "Laurie Lee", "Nathaniel Barber", "Privitera, John J.", "Ken Jock", "Jessica Jock", "Jacob Terrance", tony.penn, robert.haddad, alyce.fritz, "Julie Sims"

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To: Young Chang/R2/USEPA/US@EPA, Pietro Mannino/R2/USEPA/US@EPA

Cc: "Mark Barash" <Mark.Barash@sol.doi.gov>, <anne_secord@fws.gov>, "Lisa Rosman - NOAA Federal" <lisa.rosman@noaa.gov>, "Laurie Lee" <laurie.lee@noaa.gov>, "Nathaniel Barber" <nhbarber@gw.dec.state.ny.us>, "Privitera, John J." <PRIVITERA@mltw.com>, "Ken Jock" <ken.jock@srmt-nsn.gov>, "Jessica Jock" <jessica.jock@srmt-nsn.gov>, "Jacob Terrance" <jacob.terrance@srmt-nsn.gov>, <tony.penn@noaa.gov>, <robert.haddad@noaa.gov>, <alyce.fritz@noaa.gov>, "Julie Sims" <Julie.Sims@noaa.gov>

1 Attachment



Signed SLETC Comments GR PRAP 112912.pdf

She:kon/Hello Young,

The St. Lawrence Environment Trustee Council are pleased to submit comments regarding EPA's Proposed Plan for Remedy of the Grasse River Superfund Site.

If you have any questions regarding the attached letter, I can be reached at 518-358-5937 ext. 123.

Please acknowledge receipt of this message.

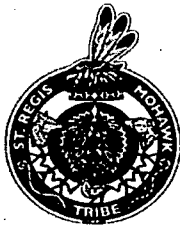
Nia:wen/Thanks,

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11/29/2012

Barbara Tarbell
Natural Resource Damage Assessment Program Manager
St. Regis Mohawk Tribe
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November 29, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young:

The St. Regis Mohawk Tribe, the United States Department of the Interior (U.S. Fish and Wildlife Service) and the National Oceanic and Atmospheric Administration, who are the tribal and federal natural resource trustees ("the Trustees") for the Grasse River appreciate the opportunity to comment on the U.S. Environmental Protection Agency's (EPA) September 2012 Proposed Plan for the Grasse River Superfund Site and the agency's preference for Remedial Alternative 6 (T1-T72 Nearshore Dredge and Backfill to Grade, T1-T72 Main Channel Capping). The EPA and the Trustees have a great opportunity to integrate remediation and restoration for this ecologically, culturally and historically significant river. We trust that these comments will be useful to the EPA in furthering our mutual goals of a cleaner and healthier river.

Cultural and Ecological Significance of the Grasse River

The grass meadows on both sides of the Lower Grasse River, within the boundary of the Grasse River Superfund Site, were set aside by the Seven Nations of Canada Treaty of 1796 for the Mohawks of Akwesasne. Tribal members fished and hunted the Grasse River prior to issuance of PCB-based fish advisories and harvested sweet grass and other medicines for traditional practices from Indian meadows. Removal of a substantial volume of PCB-contaminated sediment is the only action that will provide assurance to the Mohawk community that the fish, wildlife and habitats of the Grasse River will be available for traditional tribal uses for all future generations. The main channel of the river has the potential to serve as foraging, breeding, or nursery habitat for some fish species, (e.g., sturgeon, walleye) and should require similar remedial measures as the nearshore areas.

Prior to European township names, place names in the Mohawk language were assigned to rivers and land surrounding Akwesasne. The Mohawk name for Grasse River is *Nikentsiake*, which translates to "full of large fishes". This is significant due to the importance of known fish migration, foraging, and spawning of significant large St. Lawrence River fish species in the Grasse River tributary. The earlier Mohawk name assigned to the Grasse River accurately

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identified what resource scientists know today about the high value of the Grasse River as fish and wildlife habitat. The Mohawk name of the Grasse River is just one line of cultural evidence of the significance of the Grasse River to Mohawk uses, and intended future protection and restoration needs.

The Lower Grasse River also falls within the boundaries of the Grasse River Significant Coastal Fish and Wildlife Habitat and serves as current or historic habitat for Atlantic salmon, American eel, lake sturgeon, and other designated or proposed protected species as well as non-listed potamodromous (such as walleye, suckers, yellow perch) and resident species.

The Massena Area of Concern (AOC) includes the Lower Grasse River and Power Canal. This area was designated an AOC due to the presence of persistent toxic substances released from local industries. Several beneficial use impairments are linked to PCB contamination (e.g. fish consumption restrictions, degradation of fish and wildlife populations, degradation of benthos). In the Grasse River, the concentration of PCBs upstream of the Alcoa Grasse River Site ("the Site") is low compared to downstream and adjacent to the Site. Trans-boundary jurisdictions and impacts to downstream areas are relevant considerations for delisting impaired beneficial uses in this AOC and are driven in the Grasse River by contaminant releases from the Site. Alternative 9 would achieve better progress toward delisting the AOC than Alternative 6 because it poses less of a long term threat to downstream areas in the AOC.

Remedy Selection Can Influence Location of NRDA Restoration

The Trustees goal, to protect and restore injured natural resources, motivates us to pursue the selection of a permanent and effective remedy for the Grasse River, settlement of natural resource damages, and design and implementation of restoration projects to compensate the public for injuries from releases of hazardous waste from 3 Massena sites. The Trustees have successfully settled a natural resources damage claim with GM in bankruptcy court and are pursuing settlement with Alcoa.

The Trustees have initiated efforts to identify candidate restoration projects for the St. Lawrence watershed including the Grasse River. Restoration projects must be designed to restore, enhance, create, and/or otherwise acquire the equivalent of injured resources and services. The Trustees are evaluating potential ecological, human use, and cultural restoration. Selection of Alternative 9 provides greater assurance to the Trustees that selection and implementation of restoration actions within the Grasse River will not be compromised by remedy failure.

Trustees Previous Recommendations on Grasse River Remedial Alternatives

The Trustees seek permanent and protective remedies for natural resources (e.g., water, sediment, biological and cultural resources) in the Grasse River under our stewardship. In partial fulfillment of this responsibility, the Trustees expressed a lack of support for EPA's preferred remedy, as proposed in the EPA 2002 Draft Proposed Plan for the Grasse River Study Area (dredge \geq 25 ppm PCB, cap \geq 5 ppm PCB) for the 7.2 miles of the Lower Grasse River. The Trustees' concerns were documented in an April 19, 2002 letter to the National Remedy Review Board (NRRB). The NRRB formally recognized many of the Trustees' concerns in a

memorandum dated May 29, 2002. The Trustees appreciate that the 2012 Proposed Plan for the Grasse River Superfund Site addresses many of the issues raised about the 2002 Proposed Plan. The NRRB noted that “any selected remedy may require a combination of capping and dredging to ensure appropriate risk reduction as well as long-term reliability and there may be high, localized PCB concentrations that warrant removal as well.” The NRRB recommended Region 2 “optimize the dredging and capping components during remedial design to maximize the immediate risk reduction and relatively low cost achieved through an engineered cap, and the longer-term reliability achieved through mass removal in appropriate areas of the river bed.” EPA supported this concept and affirmed “that the removal of highly-contaminated sediments, including those in near-shore areas, may result in a more reliable and permanent remedy than the capping of such sediments.”

Comparison of Alternative 6 and Alternative 9

Alternative 6 and Alternative 9 both dredge T1-T72 nearshore sediments and then restore nearshore bathymetry through placement of backfill. The two alternatives differ in their remediation approach for the main channel of the Lower Grasse River. In Alternative 6, the construction of a main channel armored 25-inch cap between T1-T21 and a main channel unarmored 12-inch cap between T21-T72 to sequester PCB-contaminated sediments (with no main channel dredging) will leave in place a substantial inventory of PCBs. Riverine caps will be subject to erosion and bioturbation. Cap construction will significantly reduce water depths of the Lower Grasse River. Water depths will be further reduced by placement of a habitat layer on top of the cap, especially in areas of the river where armored stone is utilized. Reductions in water depth will alter the river profile and dimensions, contributing to river instability and increasing the probability of erosive forces acting upon the capped river bottom from ice scour and high flow events.

In contrast, Alternative 9 dredges a substantial portion of the main channel of the Grasse River. PCB contaminated sediments in the main channel are removed and residuals are then capped between T1 and T46 and a 12-inch non-armored cap is placed between T46 and T72, where predominantly lower concentrations of PCBs are found. Alternative 9 removes significantly less sediment than Alternative 10, but generally removes the most highly contaminated sediment from the river and thus represents a reasonable compromise because it balances protectiveness and permanence with cost-effectiveness. Selection of Alternative 9 reduces the likelihood of cap disturbance and contaminant migration due to inventory removal prior to capping and the resultant increased water depths compared to placement of a cap without any inventory removal in the main channel and the resultant decrease in water depths associated with Alternative 6. We remain concerned about the stability of caps placed on top of sediment inventory in dynamic river environments because their ability to withstand future erosional events is uncertain. For the Trustees, Alternative 9 meets the spirit of the NRRB consultation process because this alternative minimizes exposure potential, and maximizes risk reduction and long-term reliability. Alternative 6 affords greater exposure potential and less long term protection and permanence because PCB inventory in the main channel is capped in the ice scour prone section of the river (T1-T21) and in high energy areas downstream of T21.

Greater Mass of PCBs Removed Under Alternative 9 than Alternative 6 Lessens Exposure Potential

The 2012 final version of the Analysis of Alternatives Report did not include estimates of mass removed and the September 2012 Proposed Plan did not compare the pounds of PCBs removed when comparing the 10 remedial alternatives against the 9 evaluation criteria. The Trustees relied upon the 2010 estimates of PCB mass removed for a subset of alternatives reported in a 2011 draft of the Analysis of Alternatives to evaluate the amount of PCBs likely targeted for removal by Alternative 6 and Alternative 9.

Alternative B1 of the 2002 Proposed Plan proposed to dredge/cap T1-T72 to 1 ppm PCBs, equivalent to Alternative 10 of the 2012 Proposed Plan, with the removal of an estimated 18,700 kg of PCBs. Alternative C3 (2002 Proposed Plan), most similar to Alternative 6 (2012 Proposed Plan) was estimated to remove 1,100 kg of PCBs. Alternative B2 of the 2002 Proposed Plan proposed to dredge/cap T1-T72 to 1 ppm PCBs. This alternative has no comparable equivalent in the current Proposed Plan but is likely to be most similar to Alternative 9 in PCB mass targeted for removal (~13,600 kg). EPA's preferred Alternative 6 is likely to leave about an order of magnitude more PCBs in the Grasse River than Alternative 9 which significantly increases future PCB exposure potential from cap failure. The Trustees support Alternative 9 over Alternative 6 because significantly greater mass of PCB is permanently removed from the aquatic environment, making Alternative 9 more likely to permanently and reliably achieve all of the Remedial Action Objectives (RAOs).

Bottom Conditions and Remedy Selection

Capping of the main channel is selected as EPA's preferred action based on the irregular hard bottom of the river and the intermixing of rock and cobble with sediment. Site investigations suggest that these conditions are more prevalent upstream of T21 than downstream of T21. Main channel river bottom conditions have been influenced by dredging and deepening of the river channel by Alcoa in the early 1900's and subsequent deposition of upstream sediment and PCBs originating from the Alcoa Grasse River Site. Remediation of PCB-contaminated sediment in the St. Lawrence River at the GM and Reynolds Sites encountered similar constraints related to rock and cobble in the channel, but mechanical dredging successfully removed most of the targeted inventory and remaining residual contamination was capped. The rationale against dredging does not appear to be supported by previous work at these other Massena sites. The Trustees recommend that EPA select a remedy for the Grasse River that is more similar to the one implemented at Reynolds and GM Sites, which are both located just downstream of the mouth of Grasse River and could become re-contaminated if the Grasse River remedy is not fully effective in sequestering PCB-contaminated sediments. The Reynolds and GM Records of Decision selected dredging as the primary action for remediating contaminated river sediments.

Cost Effectiveness, Time to Remedy Completion and Attainment of Remedial Action Objectives

The Trustees are concerned that the costs and the duration of construction for remedial alternatives with a dredging component are inflated and do not reflect costs or time frames experienced at other Superfund sites. The time frame required to achieve RAOs for remedial

alternatives that include some amount of dredging are protracted due to the protracted construction period. While costs and productivity were based on the site-specific Remedial Options Pilot Study (ROPS), they likely are not characteristic of a full scale dredging operation.

During the ROPS 2005 construction season, the sediment removal rate of 20 to 38 cy/hr was achieved. Low sediment removal productivity was related to damaged equipment, difficulty in removing residual sediments, problems deploying and maintaining silt curtains, bottlenecks in water treatment and dewatering due to insufficient capacity, and attainment of a 2 ug/l PCB water column criterion. At Reynolds, 86,600 cy of sediment were dredged during the 2001 construction season where an action level of 2 ug/l was used. Improving the depth of the cut line, modifying dredging procedures, and improving capacity at the dewatering facility should significantly improve sediment removal rates. Greater economies in scale would seem reasonable when implementing a multi-year >600,000 cy removal compared to a 25,000 cy one year pilot study. Using updated estimates and assumptions for productivity would reduce costs of construction, reduce the length of the construction period and provide more similarities in the years required to attain RAOs. In addition, the potential hidden costs of dealing with an erosional event or cap failure due to a major storm could be significant, resulting in the future need for additional sampling, mass removal, recapping, and monitoring, thereby substantially increasing the cost of Alternative 6 and time to attainment of RAOs.

Selection of ARARs

Members of the tribal community traditionally use the Grasse River and water bodies within and near Akwesasne. The St. Regis Mohawk Tribe promulgated a sediment standard for PCBs of 0.1 ppm on April 30, 1989. The federal Trustees support the Tribe in their request that their sediment standard be considered as a "relevant and appropriate" standard for the cleanup of the Grasse River since the United States maintains that Akwesasne, Mohawk territory of the federally-recognized SRMT, as described in the 1796 Treaty with the Seven Nations of Canada, 7 Stat. 55, includes land on both banks of the Grasse River, as well as land located along the St. Lawrence River downstream of the Site, together known as the Indian Meadows.

Mohawk Special Fish Advisory

The Proposed Plan should acknowledge the Mohawk Special Fish Advisory for consumption of lake sturgeon issued in 1995 by NYSDOH based on elevated PCB concentrations in flesh and roe. The Mohawk population was advised to eat no more than one meal per month of flesh or roe of lake sturgeon from the St. Lawrence River. Women of childbearing age and children under the age of 15 were advised to not eat any lake sturgeon flesh or roe. No advisory was issued for the general angling public since sport angling for lake sturgeon is prohibited in New York State.

Potential Extent and Degree of Ice Jam Formation

In the main channel of the Grasse River, Alternative 6 proposes construction of an armored cap between T1-T21 and a non-armored cap between T21-T76 without any sediment removal. Cap construction and placement of a habitat layer on top of the cap will raise the elevation of the river

bottom. The capped PCB inventory will protrude significantly into the water column exposing it to the erosive forces of high flow and ice jam formation. Information is insufficient to rule out historic or future ice scour or high flow erosional events downstream of T21. Lines of evidence documenting areas prone to ice scour provided by Alcoa included tree scars, core stratigraphy and geochronology, and changes in bathymetry. While EPA may ultimately place armored caps in high energy areas in the main channel downstream of T21, this will create greater discrepancies in sediment elevations due to the approximate 1 foot differences in armored and unarmored cap thicknesses. Modifications to the river hydrodynamics and bathymetry by remedy implementation will likely change erosional and depositional patterns that the current conceptual site model does not capture. Removal of significant PCB mass and contaminated sediment inventory reduce the potential for breaching or catastrophic failure of the caps and lowers the risk of future exposure, recontamination of remediated areas and downstream transport within the Grasse River and into the St. Lawrence River.

Effect of Global Climate Change on Remedial Decision Making

EPA issued a policy statement on climate change adaptation in 2011 that included application of the guiding principles and planning framework for climate change adaptation, understanding the environmental justice implications of climate change on vulnerable communities, and incorporating said issues into design and evaluation. Selection of Alternative 9 significantly reduces the degree of uncertainty in long term permanence, reliability and protectiveness posed under changing climate scenarios compared to selection of Alternative 6 due to the greater vulnerability of sequestered large volumes and mass of PCBs to projected increased frequency and severity of storms and changes in climatological conditions relative to those assumed by model runs.

Habitat Reconstruction

Habitat reconstruction should ameliorate impacts from the remedy on the ecosystem and enhance the ecosystem services provided to the general public and the tribal community and be consistent with general AOC delisting goals. The Trustees request that EPA coordinate with us on baseline habitat conditions, other natural resource and habitat reconstruction approaches (e.g. freshwater mussels, thickness of habitat layer) as the remedy is designed and implemented.

Concluding Remarks

The preferred Alternative 6 in the September 2012 Proposed Plan includes placement of an armored cap to sequester PCBs in the upper portion of the main channel of the Lower Grasse River that is most prone to ice scour and a non-armored cap for the remainder of the main channel. These caps may not protect against future non-modeled conditions of more extreme and frequent storms and erosion (due to ice scour, high flows) and other unknowns. Outcomes may be significantly different from model projections, including increased potential for recontamination of sediments or release of PCBs into the aquatic system, or catastrophic cap failure. Monitoring and maintenance of Alternative 6 will not adequately protect against breaching of the cap or downstream and trans-boundary issues. Selection of Alternative 9 provides greater confidence that human and environmental health will be protected over the long

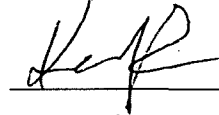
term. The more protective the selected remedy the greater the opportunities for: 1) lifting beneficial impairments within the Massena AOC; 2) restoring ecosystem services and the full use of the river by the general public and tribal community; and 3) reducing exposure, risk, and injury to the fish and wildlife that inhabit the river.

If you have any questions or comments, please do not hesitate to contact us.

On behalf of the Trustees,

Robert Haddad
Director, Assessment and Restoration Division
National Oceanic and Atmospheric Administration
United States Department of Commerce

David Stilwell
Supervisor, NY Field Office, Fish & Wildlife Service
United States Department of the Interior




Ken Jock
Director, Environment Division
St. Regis Mohawk Tribe

cc: Mark Barash, DOI
Anne Secord, USFWS
Lisa Rosman, NOAA
Laurie Lee, NOAA
Nathaniel Barber, NYSDEC
John Privitera, SRMT
Barbara Tarbell, SRMT

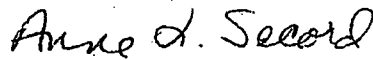
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Robert Haddad
Director, Assessment and Restoration Division
National Oceanic and Atmospheric Administration
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for


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cc: Mark Barash, DOI
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Grasse River Proposed Plan
Lisa Rosman - NOAA Federal

to:

Young Chang, Pietro Mannino

11/29/2012 04:22 PM

Cc:

Alyce Fritz - NOAA Federal, Laurie Lee - NOAA Federal, amy roe, david tromp, jacob terrance, barbara tarbell

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1 Attachment



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Young

Please accept NOAA's comments on EPA's September 2012 Proposed Plan for the Alcoa Grasse River Superfund Site.

Lisa

--

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12/5/2012



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Assessment and Restoration Division
290 Broadway, 20th Floor
New York, New York 10007

November 29, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young:

The Proposed Plan for the Grasse River Superfund Site has been reviewed by the National Oceanic and Atmospheric Administration (NOAA). NOAA prefers Alternatives 9 and 10 over EPA's preferred Alternative 6. The following comments are offered for consideration by EPA during the public comment solicitation period.

Summary of EPA's 2012 Proposed Plan for the Grasse River Superfund Site

The Proposed Plan for the Grasse River Superfund Site describes the history of the site, the contaminant of concern, human health and ecological risk assessments findings, the remedial alternatives evaluated to address PCB-contaminated sediments and EPA's preferred remedial alternative.

The human health risk assessments determined the following:

- Carcinogenic risk and non-carcinogenic hazards was due to ingestion of PCB-contaminated fish by local adult anglers from the Grasse River adjacent to and downstream of the Alcoa facility (Reaches 4-8), and by local adult Mohawk from the Grasse River in the Lower Reach (Reaches 7-8) of the lower Grasse River;
- For young children and adolescents consuming contaminated fish, cancer risks exceeded the risk range of 10^{-4} to 10^{-6} for Reaches 4-8 while non-cancer health hazards were above the goal of protection for all reaches.
- Potential risks from exposure to PCB-contaminated sediments and surface water for the recreational user were within EPA's range of acceptable cancer risk for adults, adolescents, and children (Reaches 4-8) but were above the goal of protection from non-carcinogenic hazards for adolescents and children (Reaches 4-8);

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- Risks to Mohawk anglers from PCB-contaminated sediments and surface water were within the goals of protection for carcinogenic and non-carcinogenic hazards; and
- The goal of protection for adult angler from non-cancer hazards from non-PCB contaminants of potential concern was exceeded.

The 2010 update to the ecological risk assessment identified potential adverse effects to the reproduction, growth, or survival of aquatic organisms, piscivorous receptors, and insectivorous receptors in sediments, surface water and/or prey items as follows:

- Unacceptable risk to aquatic organisms from exposure to maximum concentrations of Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260, total PCBs, and dioxin-like PCB congeners in Grasse River sediments;
- Unacceptable risk to aquatic organisms from exposure to mean concentrations of Aroclor 1221, 1242, 1248, 1254 and total PCBs in Grasse River surface water;
- Unacceptable risk to aquatic organisms from exposure to maximum concentrations of total PCBs and dioxin-like PCB congeners in Grasse River surface water;
- Unacceptable risk to fish (i.e., reduced survival, growth, and/or reproduction) based on mean and maximum concentrations of total PCBs and dioxin-like PCB congeners in fish;
- Unacceptable risk to insectivorous mammals from dietary exposure to various Aroclors 1248 and 1260, and total PCBs; and
- Unacceptable risk to piscivorous birds and mammals from dietary exposure to Aroclors 1232, 1248, 1254, and 1260, and total PCBs.

Remedial action objectives (RAOs) include the following:

- Reduce cancer risks and non-cancer health hazards for people eating fish from the Grasse River by reducing the concentration of PCBs in fish;
- Reduce the risks to ecological receptors by reducing the concentration of PCBs in fish;
- Minimize the current and potential future bioavailability of the PCBs in sediments;
- Protect the ecosystem of the lower Grasse River; and
- Minimize the long-term transport of PCBs from the lower Grasse River to the St. Lawrence River.

Preliminary remediation goals (PRGs) of 0.05 ppm and 0.01 ppm PCBs in fish were calculated to protect the general public and Mohawks, respectively from fish consumption. Interim goals include 0.26 ppm and 0.36 ppm PCBs based on an average 0.5 pound consumption rate every one or two months, respectively. PRGs of 0.22 ppm - 0.44 ppm PCBs (wet weight) in whole body brown bullhead and spottail shiner and 0.1 ppm - 0.22 ppm PCBs (wet weight) in brown bullhead fillet were developed to protect ecological receptors.

Remedial alternatives cleanup trigger is 1 ppm PCBs based on maximum surface concentration or segment length weighted average concentration except for Alternatives 1, 2 and 5 where either there is no active remediation or the trigger is as high as 10 ppm PCBs. Surface is defined as the top 6 inches in the nearshore and the top 12 inches in the main channel. Armored and non-armored main channel caps are designed at 25 inches and 12 inches thick, respectively. The nearshore cap is 6 inches thick. Dredged nearshore areas are returned to pre-existing grade with backfill placement.

The ten remedial alternatives evaluated include:

- Alternative 1: No Further Action (NFA);
- Alternative 2: Monitored Natural Recovery (MNR);
- Alternative 3: Capping: Main Channel Armored Cap T1-T21 (59 acres), Main Channel Non-armored Cap T21-T72 (225 acres), Nearshore Cap T1-T72 (41 acres)
- Alternative 4: Main Channel Armored Cap T1-T21 (59 acres), Main Channel Non-armored Cap T21-T72 (225 acres), Nearshore Dredge T1-T21 (26,000 cubic yards (cy)), Backfill T1-T21 (10 acres), Nearshore Cap T21-T72 (31 acres);
- Alternative 5: Main Channel Armored Cap T1-T21 (59 acres) and Main Channel Non-armored Cap T21-T72 (225 acres) ≥ 1 and <10 ppm PCBs, Dredge Nearshore T1-T72 ≥ 10 ppm PCBs (46,000 cy), Backfill Dredged Nearshore T1-T72 (13 acres), Cap Undredged Nearshore (31 acres);
- Alternative 6: Main Channel Armored Cap T1-T21 (59 acres), Main Channel Non-armored Cap T21-T72 (225 acres), Dredge Nearshore T1-T72 (109,000 cy), Backfill Dredged Nearshore T1-T72 (41 acres);
- Alternative 7: Dredge Select Main Channel T1-T19.5 and Nearshore T1-T72 (259,000 cy), Main Channel Armored Cap T1-T21 (59 acres), Main Channel Non-armored Cap T21-T72 (225 acres), Backfill Dredged Nearshore T1-T72 (41 acres);
- Alternative 8: Dredge Main Channel and Nearshore T1-T21 (355,000 cy), Armor Cap Dredged Main Channel T1-T21 (59 acres), Main Channel Non-armored Cap T21-T72 (225 acres) and Nearshore T21-T72 (31 acres), Backfill Dredged Nearshore T1-T21 (10 acres);
- Alternative 9: Dredge Select Main Channel T1-T46 and Nearshore T1-T72 (634,000 cy), Armor Cap Dredged Main Channel T1-T21 (59 acres), Non-armored Cap Dredged Main Channel T21-T72 (225 acres), Backfill Dredged Nearshore T1-T72 (41 acres); and
- Alternative 10: Dredge Main Channel and Nearshore T1-T72 (1,664,000 cy), Armor Cap Dredged Main Channel T1-T21 (59 acres), Non-armored Cap Dredged Main Channel T21-T72 (225 acres), Backfill Dredged Nearshore T1-T72 (41 acres).

EPA's preferred remedy is Alternative 6: T1-T72 Nearshore Dredge and Backfill to Grade, T1-T72 Main Channel Capping.

NOAA Seeks Permanent and Protective Remedies

NOAA seeks permanent and protective remedies for its trust resources (water, sediment and biological resources) in the Great Lakes. The river is designated as a Significant Coastal Fish and Wildlife Habitat and is situated within the St. Lawrence River at Massena Area of Concern. Selection of a remedy that is protective for lake sturgeon and American eel is of particular concern to NOAA. Lake sturgeon is threatened in New York State (NYSDEC 2012a) and recent studies have demonstrated adverse effects to sturgeon species from PCB 126 and TCDD (Buckler et al. 2009, Roy et al 2011, Wirgin and Chambers 2011, Chambers et al. 2012) and Doering et al. (2012a,b) work on aryl hydrocarbon receptors in white sturgeon suggest greater sensitivity than some other fish species. Federal endangered species status is being considered for the American eel (USFWS 2011) and their decline in the St. Lawrence River have been partially attributed to environmental contaminants (Castonguay et al. 1994). Remedy implementation serves as primary

restoration of the Grasse River. The more protective the selected remedy the greater the opportunities for restoration of ecosystem services, for the full use of the river by the public, and for reduced exposure and risk to the fish and wildlife that inhabit the river. Compensatory restoration may be implemented in the future by the St. Lawrence natural resources trustees (NOAA, USFWS, SRMT, NYS) once an agreement on natural resource damages with Alcoa is resolved (Rosman et al. 2012).

Grasse River Remediation Benefits the St. Lawrence River at Massena Area of Concern

Numerous Areas of Concern (AOC) within the Great Lakes Basin have been identified by the International Joint Commission (IJC) where persistent toxic substances, such as PCBs, impair the use of resources. Waters within the St. Lawrence River at Massena AOC are within the jurisdiction of New York State, Canada and the St. Regis Mohawk Tribe. The Massena AOC includes the Grasse River (from its mouth upstream to the breached Massena dam) and the Power Canal. Impairments to the Massena include but are not limited to restrictions on fish and wildlife consumption, loss of fish and wildlife habitat, transboundary impacts, degradation of benthos, fish and wildlife populations, wildlife deformities or reproduction problems, and restrictions on dredging due to PCBs and other contaminants. The goal of the Massena Remedial Action Plan (RAP) is to restore, protect and maintain the physical, chemical and biological integrity of the AOC in accordance with the Great Lakes Water Quality Agreement (NYSDEC 1991).

Recommendations #1 and #2 of the RAP recognize hazardous waste sites as likely sources of contaminants to the Massena AOC and call for full consideration of trans-boundary effects (e.g., impacts on downstream areas originating from the Massena AOC). Recommendation #8 recognizes the potential for recontamination of remediated areas and advocates for remediation of upstream sediment sources prior to downstream sources. Remediation of downstream contaminated sediments in the St. Lawrence River off of the Reynolds Metals (now Alcoa East) and General Motors Central Foundry (GM) Sites were conducted prior to issuance of the current Proposed Plan. Future implementation of Grasse River remedy relative to the GM and Reynolds remedies will not follow the sequencing recommended in the RAP. NOAA believes Alternative 9 provides the best opportunity to balance the goals of the AOC and CERCLA because Alternative 9 provides greater assurance that trans-boundary effects will be minimized, lowers the probability of recontamination of downstream sediments once the remedy has been implemented, and makes significant strides towards the goal of lifting beneficial use impairments relative to the majority of alternatives including EPA's preferred alternative.

EPA's 2002 vs. 2012 Proposed Plan for the Lower Grasse River

In 2002, EPA presented their proposed remedy (Dredge Sediments with Surface PCBs \geq 25 ppm, Cap Sediments with Surface PCB concentrations \geq 5 ppm, Construct an Engineered Cap at Outfalls 001 and 004) for the Grasse River to the National Remedy Review Board (NRRB) and drafted a Proposed Plan. The natural resource trustees, NOAA, the Department of Interior and the St. Regis Mohawk Tribe, submitted comments to EPA's NRRB in a letter dated April 19, 2002. NOAA subsequently submitted comments on the June 2002 Proposed Plan for the Grasse River on June 25, 2002. These comments expressed support for

- the selection of a lower cleanup triggers (i.e., 1 ppm PCBs) comparable to nearby Reynolds and GM sites and other PCB sites nationwide;
- the identification of areas for remediation based on the full sediment column rather than the top 3 inches;
- the evaluation and mitigation of impacts to habitat from remedy implementation; and
- a preference for removal of PCB-contaminated sediments relative to construction of isolation caps.

The current draft of the Proposed Plan takes into account the various studies conducted by Alcoa and the risk assessment updates completed by EPA since 2002. EPA's currently preferred remedial alternative targets similar volumes of sediment as the 2002 preferred alternative but the area of river targeted for removal has changed. Instead of dredging sediment from both the main channel and nearshore environments, EPA's current proposal dredges sediment solely from the nearshore environment, because of the expectation that these sediments pose a greater exposure potential for fish and wildlife than main channel sediments.

NOAA appreciates that many of the concerns we raised about the 2002 Proposed Plan have been addressed. A new RAO has been inserted in the current Proposed Plan that specifically requires ecosystem protection, habitat replacement and reconstruction to support fish and wildlife, and monitoring of ecosystem recovery. The preponderance of active remedial alternatives evaluated in the 2012 Proposed Plan utilize 1 ppm PCB as the cleanup trigger and evaluates remediation areas based on segment length weighted average concentration and or the top 6 to 12 inches of sediment rather than the top 3 inches. The importance of habitat is acknowledged through the requirement for baseline biological surveys of biota and habitat, reconstruction of remediated habitat, and the restoration of nearshore bathymetry by placing backfill to pre-existing grade following dredging.

Consistency with EPA Responses to NRRB Recommendations

EPA responded to the NRRB recommendations on April 30, 2003. At that time, the region concurred that "decision documents will clarify the benefits of the preferred alternative over the other alternatives, with an emphasis on the improvements in risk reduction, permanence and long-term reliability gained from removing the most contaminated sediments from the Grasse River, as well as the cost-effectiveness of the preferred remedial alternative." NOAA believes that Alternative 9 provides the permanence, risk reduction, long-term reliability and removal of the most contaminated sediments. Alternative 9 would also be cost effective because of the added insurance it provides against remedy failure and the potential reduction in costs associated with full scale dredging compared to pilot study dredging.

NOAA's Preferred Remedial Alternative

Past removal actions and pilot studies in the Lower Grasse River resulted in capping of 15 acres, and removal of 29,000 cy of sediment and 15,200 pounds of PCBs. EPA's 2012 preferred remedy, Alternative 6, dredges 41 acres of nearshore sediment and caps 289 acres of main channel sediment in the lower 7.2 miles of Lower Grasse River. Based on our analysis of the various alternatives, and for reasons detailed in these and previous comments to EPA (see for example, NOAA comments dated May 18, 2010 on the Analysis of Alternatives Report), the remedy

preferred by EPA provides a lower probability of long-term protection of NOAA's trust resources than Alternatives 9 or 10 because of the mass of PCBs that will remain in the river and the reduced cross-sectional area of the river.

NOAA prefers Alternative 10 because of its comprehensiveness but Alternative 9 would be acceptable since it substantially reduces the inventory of PCBs in both the nearshore and main channel and the risks from exposure to contaminated media without significantly reducing the depth of the water column and is more likely to sustainably achieve all the RAOs over the long term compared to Alternative 6. Alternative 6 caps T1-T21 main channel sediments that were recorded with similar range and average PCB concentrations as near shore sediments targeted for removal. Alternative 6 removes nearshore sediments between T21-T72 that are less contaminated and caps more contaminated main channel sediments. The main channel of the river is important habitat for lake sturgeon, walleye and other species that use deeper channel areas for foraging, reproduction and as a migratory corridor. The PCB exposure potential from main channel sediments should be treated consistent with nearshore exposure to similarly or lesser contaminated nearshore sediments and trigger removal to reduce exposure and risk consistent with nearshore sediments.

Alternative 9 (and other dredging alternatives) could be more cost-effective than currently estimated with improved dredging efficiencies using methodologies and experiences gained at other sites that could provide improved estimates compared to those generated from the 2005 Remedial Operations Pilot Study. Mass removed by each remedial alternative should have been quantified and reported in the Proposed Plan. Based on earlier estimates, Alternative 9 might remove about 10 times the PCBs as Alternative 6. Mass removal confers a greater degree of protection than capping and permanently removes the potential for remobilization of and exposure to PCBs within the Grasse River and further downstream in the St. Lawrence River.

Comparison of EPA's vs. NOAA's Preferred Remedial Alternative for the Lower Grasse River

EPA's preferred remedy doesn't consider the legacy of capping large volumes of PCB-contaminated sediment (e.g. recontamination through catastrophic failure of the cap), increased uncertainty of cap stability and permanence due to reduced water depths from capping without some dredging, and precludes potential future uses of the river by isolating PCB inventory in the main channel. The Proposed Plan also accepts Alcoa's estimates of low dredge production rates and protracted construction periods for dredging remedies which increases the costs of the alternatives more weighted toward dredging and significantly extends the time frame required to achieve targeted PCB concentrations in fish specified in the RAOs.

Of the remedial alternatives evaluated, Alternatives 1 and 2 are non-active, Alternative 3 is a capping remedy, Alternatives 4, 5, and 8 partially dredge the nearshore and cap all or part of the main channel, Alternatives 6 dredges the nearshore and caps the main channel, Alternatives 7 and 9 dredge the nearshore and partially dredge the main channel, and Alternative 10 dredges the main channel and nearshore. NOAA does not support Alternatives 1 and 2 as a primary remedial strategy because exposure and risk from PCBs is not resolved since neither alternative reduces the toxicity, mobility or volume of PCBs and contamination left behind will continue to be redistributed and transported downstream perpetuating human and ecological risks. Alternative 3

caps 325 acres of the lower Grasse in both the nearshore and main channel. This alternative does not provide a thick enough cap in the nearshore to prevent biological exposure, nearshore cap construction decreases water depth adversely affecting nearshore habitat and significant inventory in the main channel of the river is isolated rather than removed. Alternative 4 provides for dredging of the upper 2 miles of nearshore habitat but caps the remaining 5 miles of nearshore habitat and 7 miles of the main channel. This alternative raises similar concerns as does Alternative 3. Alternative 5 uses a higher PCB concentration to trigger clean up so this alternative is less protective than Alternatives 3, 4, 6-10. Alternative 6 dredges the nearshore and caps the main channel. The T1-T21 armored cap could be susceptible to erosional events; the T21-T72 unarmored cap would be vulnerable to bioturbation and erosion. The cap and overlying habitat layer proposed for 225 acres in the main channel will raise the sediment bed by several feet, increasing the probability of scour potential. Alternative 7 requires some main channel dredging that combined with nearshore dredging removes ~46% more PCB-contaminated sediment than Alternative 6 with focused main channel removal in the upper reaches of the lower Grasse River. While Alternative 8 removes more of the inventory in the main channel than Alternative 7, it allows for capping of nearshore sediments in T21-T72 and impairs nearshore habitat similar to Alternatives 3 and 4. Alternative 9 dredges nearshore sediments from T1-T72 and targets areas for dredging in the main channel from T1-T46, thereby removing more than twice the contaminated sediments as Alternative 7 and is the closest in scale to our recommendations for an alternative that was protective but less comprehensive than dredging all 7 miles of the lower Grasse. Alternative 10 is the most protective and permanent since it removed the most inventory of PCBs, dredges then caps residuals in the main channel, and would be the most preferable and consistent with the remedies selected at two other Massena Sites (GM and Reynolds). However, Alternative 9 affords the next best opportunity for minimizing the exposure potential, and maximizes permanence and protection more cost-effectively than Alternative 10. While capping is slated for all alternatives with a main channel dredge component, in dredged areas capping is conducted to sequester residuals rather than inventory and is not likely to raise the elevation of the river bed. Time and money could be saved during remedy implementation if dredging does not leave residuals in some areas of the river and capping is not required or a different type of cap could be utilized.

While the cleanup goal for the preferred alternative is 1 ppm, no inventory will be removed from the upper 2 miles of the main channel between T1-T21 in the section of river identified as most prone to ice scour or to the lower 5 miles of main channel between T21-T72. While the Grasse River is net depositional, specific areas of the river have been identified as depositional or erosional. Those patterns can change over time. EPA's preferred remedy primarily utilizes armored and unarmored capping to address sediment contamination in a dynamic riverine main channel environment, which is not a demonstrably permanent solution. An extensive capping program of inventory PCBs incurs greater risks of catastrophic failure, requires more extensive maintenance and monitoring, and leaves the river more vulnerable to resuspension of contaminated sediments during thick ice or high flow events, dam failure, or to alterations in local river hydrology from future changes in land use practices and climate change than remedial alternatives that dredge and cap residuals in the main channel.

Solutions to the ice scour issue evaluated over time were dredging, construction of an ice control structure or capping. In light of the ice jam event that scoured about 5 feet of cap and underlying sediment in the Capping Pilot Study area, NOAA expected EPA to select a remedy that called for

the removal of inventory in the most ice prone section of the river. Investigations into the 2003 scour event lend to observations of ice-jam related tree scars and core stratigraphy confirmed T1-T21 as an ice scour prone region. Scarred trees were also observed down river of T21 but scarring was at a height of 1-2 feet above mean low water and attributed to normal sheet ice floe. While cores were collected for stratigraphic analysis downstream of T21, the furthest downstream cores were obtained was at T37 to represent the lower downriver alluvium. No evidence of ice scour was observed but these cores were collected in an area where there was no evidence of tree scars of any kind. Core stratigraphy was not conducted between T40 and T50 where tree scars were recorded at near normal water levels. Core data is not available to confirm that ice jams have not occurred in the lower reach of the Grasse River.

NOAA is not confident that the proposed armored cap will permanently sequester the estimated 330,000 cy of PCB-contaminated sediment in this section of the river. Concentrations range up to 3,106 ppm and average 82 ppm between T1 and T21 in the main channel. Average concentrations are somewhat higher in the main channel than in the adjacent nearshore targeted for dredging but concentration ranges are comparable. While modeling suggests that the capping may be effective in isolating the PCBs, the current model may not account for future changes in hydrology and precipitation associated with climate change or with changes in deposition and erosion zones once the surface elevations of the river are significantly raised post-remediation due to the placement of cap and habitat material on top of the unremediated sediments. The long-term risks of not removing the PCB inventory in this region are too great for ecological and human receptors and should lead to the dredging of portions of the main channel to remove PCB inventory particularly those subject to scour events. The exposure, recontamination and downstream transport risks associated with remobilization of PCB inventory are much greater than remobilization of PCB residuals that would remain post-dredging. In addition, the cost, construction period, and time to recovery estimates are based on a low dredge production rates that provide a more protracted construction period for dredging. Increased dredging production rates, separation of TSCA and non-TSCA waste, and other efficiencies that could be incorporated during design and implementation could reduce the cost and years to construct for alternatives containing a main channel dredging component thereby achieving target PCB concentrations in fish for protection of human health and the environment sooner than time frames presented in the Proposed Plan. The various alternatives with a main channel dredging component also have the potential to better achieve the non-numerical RAOs and for those goals to be sustained over the long term.

Remedial Options Pilot Study Used to Drive the Preferred Remedial Alternative for Main Channel Sediments

The results of the Remedial Options Pilot Study (ROPS) are used in the Proposed Plan to support main channel capping due to the uneven hard bottom (bedrock and till) and boulders. During the design of the ROPS, NOAA and other resource agencies raised questions about the suitability of the horizontal dredge given the sediment type and bottom conditions in the Grasse River. In addition, insufficient time and effort was spent mechanically dredging main channel during the ROPS to reliably conclude the outcome under full scale dredging operations and productivity was low in part to meet the 2 ug/l PCB water column action level. While capping of residuals will be required under any dredging scenario, dredge production rates should greatly improve relative to the ROPS by selection of appropriate equipment for debris and sediment removal, eliminating or

minimizing bottlenecks for sediment transport and processing, and working without the PCB water column action level restriction.

Sediment Deposits Above and Below T21

Sediment deposits in the Grasse River upstream of T21 generally overlay the irregular hard bottom while sediment deposits downstream of T21 typically overlay silts and clays. Because of these differences, Alcoa initially assumed an overdredge allowance in their dredging cost estimates for T21-T72. In the Final Analysis of Alternatives Report, a factor of 1.1x was applied to main channel dredging between T1-T34 and T49-T59. A factor of 1.5x was applied to main channel dredging T34-T49 and T59-T72 and to T1-T72 near shore dredging T1-T72. The premise that dredging will be ineffective for all or part of the T21-T72 section of the Grasse River seems in conflict with Alcoa's assessment of bottom conditions and with cost assumption. The ability to overdredge areas downstream of T21 suggests that dredging of these areas is more practical than presented in the Proposed Plan. Costs for dredging alternatives could also be reduced since target cleanup concentrations are more likely to be achieved where overdredging is conducted, reducing the need for caps.

Grasse River Preferred Option Compared to Other PCB Sites

The St. Lawrence River sediments adjacent to the Reynolds Metals and General Motors Foundry Site have irregular bottom topography, debris, boulders and cobbles, conditions similar to the Grasse River. Contaminated sediment (86,000 cy) in the St Lawrence River adjacent to the Reynolds Metal Site was remediated in 2001 using mechanical dredges (Bechtel 2000) and residuals were capped (Alcoa 2010). At the General Motors Central Foundry Site, boulders and debris were excavated with a mechanical dredge (BBL 1996) and about 99% of PCB mass were removed with a horizontal auger dredge, and residuals were capped (EPA 2005). Capping of dredged sediments comprised approximately 20-40% of the remediated area at either of these two sites (EPA 2005), compared to the 100% assumed in the Grasse River Proposed Plan. At the Hudson River PCBs Superfund Site, between 283,000 cy and 650,000 cy of sediment have been dredged in each of the three years dredging has been conducted. The Hudson River remediation program differs from Alternative 6 in that dredging is the primary remedy where the objective of capping was to sequester residual PCBs and address areas posing engineering constraints once the extent of dredging technically practical was accomplished without generally exceeding the pre-dredge bathymetry. Isolation capping has been significantly less than the 50% assumed during the remedial design (EPA 2010, EPA 2012a,b).

Potential Extent and Degree of Ice Jam Formation

The frequency and intensity of future ice jams events is unknown but in the past, ice jams are believed to have occurred decadal in the Lower Grasse River. As a result of the 2003 ice scour event and subsequent investigations, the revised conceptual site model assumes ice jams form in the Lower Grasse River upstream of T21 and sheet ice floes act upon the river downstream of T21. Under EPA's preferred remedial alternative, no inventory will be removed from the ice jam prone upper 2 miles of the main channel between T1-T21; instead an armor cap will sequester PCB-contaminated sediment. A non-armored cap will sequester contaminated sediments between T21

and T72 because stratigraphic cores showed no evidence of ice scour between T21 to T37 but these cores were collected from transects where there was no evidence of tree scars of any kind. Cores collected downstream of T21 contain sand and gravel layers that post-date PCB use suggesting sediment transport into these areas from erosive events. Confirmatory evidence is lacking to support the sheet ice floe hypothesis because core stratigraphy was not conducted between T40 and T50 proximate to areas where tree scars were recorded. The protectiveness of the main channel non-armored cap between T21 and T46 is uncertain due to the lack of confirmatory evidence to rule out past ice scour events. Selection of Alternative 9 removes sediments above 1 ppm PCB between T21 and T46, thereby, reduces the likelihood of significant remobilization and redistribution of PCBs. Bathymetric data collected in 1998 and 2001 only extended downstream to T38 which hampered analysis of the change in sediment elevations following the 2003 ice jam scour event. These baseline surveys cannot provide supporting evidence about the lack of ice jams downstream of T38 where tree scars have been observed.

Ice jam formation is dependent on river discharge rates and ice thickness. Bottom shear stress created by turbulent flow beneath the jam and the depth of erosion depend upon the geometry of the ice jam relative to the river bottom profile. Placement of armored cap material between T1-T21 and non-armored cap material between T21-T72 will alter the river bottom microtopography and profile and reduce water depths. Modifications to the river hydrodynamics and bathymetry by remedy implementation will likely change erosional and depositional patterns that the current conceptual site model does not capture. Removal of significant PCB mass and contaminated sediment inventory reduce the potential for breaching or catastrophic failure of the caps.

Effect of Global Climate Change on Remedial Decision Making

Climate change can affect the stressors to and responses of ecosystems. Since past conditions may not reflect current or future conditions, conceptual site models and model parameterization may not reflect a changing environment. Failure to ask the right questions when assessing and managing human health and ecological risk could produce model predictions that are highly uncertain and potentially wrong (Stahl 2012). Model scenarios for the Lower Grasse River assessed the effect of the cap and habitat layer construction on river hydrodynamics but did not assess cumulative impacts of or the potential for increased frequency and intensity of storms, and could overestimate the protectiveness of the armored and unarmored caps. Model output is uncertain until it is verified and validated; and global climate change increases the uncertainty of model predictions. A 13% difference in flow velocity for 100 and 500 year flood events was reported in the 2012 Final Analysis of Alternatives Report where the 500 year flood event was from a 1980 FEMA flood insurance study. The increase in velocity for the 500 year flood event was associated with a 28% increase in shear stress, and a 64% increase in erosion (~1.5 cm). The estimates for the 500 year flood event estimates may not reflect current or future conditions due to climate change.

The occurrence and frequency of extreme and atypical storms are projected to increase in the Massena Area with, for example, increased precipitation of 5-15% projected during winter months (Rosenzweig 2011). Changes in frequency and intensity of storms have the potential to re-expose PCBs as a consequence of significant or catastrophic failure of the cap. Alternative 9 is preferred because it significantly reduces the degree of uncertainty in long term permanence and

protectiveness posed under changing climate scenarios compared to selection of Alternative 6 due to the vulnerability of caps sequestering high volumes and mass of PCBs.

Prior actions at the Grasse River site relied upon conceptual site models and model outputs to support the placement of a 1-foot thick cap as a pilot. The 7-acre cap constructed during the 2001 Cap Pilot Study was subjected to an ice jam event in March 2003 that eroded portions of the 1-foot thick cap and almost 4 feet of sediment below the cap (~32,000 cy)¹. The model used to assess the impact of this pilot cap did not predict erosion of the cap since ice scour was not incorporated into the model. As a consequence the conceptual site model was revised. Although an armored cap is proposed as a component of Alternative 6 for the ice scour prone section of the river, the 2003 event highlights the potential impact of the unknown that could be magnified over a broader expanse of the river if Alternative 6 is selected.

Habitat Reconstruction

NOAA appreciates EPA's recognition of the importance and significance of the natural resources of the Lower Grasse River in the Proposed Plan and its requirement for habitat surveys and reconstruction. NOAA would like to work with EPA during the remedial design process to ensure that baseline sampling conducted prior to remedy implementation assessing the habitats and the resources those habitats support are adequately characterized and delineated. In addition, we have a strong interest in assuring replacement and reconstruction of all habitat types impacted by the remedy in a timely and successful manner such that function and structure of the Lower Grasse River ecosystem is returned as quickly as technically possible. NOAA's Restoration Center expertise in restoring habitats provides an invaluable resource for EPA during development of design documents, drawings and contract specifications. Performance criteria should be developed during remedial design to assess success. An adaptive management framework should be followed to ensure that reconstructed habitats are sustainable. NOAA would appreciate the opportunity to review these documents as they are developed.

Loss of Freshwater Mussel Habitat

The dredging and capping remedial alternatives (Alternative 3 – Alternative 10) will likely destroy freshwater mussel beds in the Lower Grasse River through removal and/or burial. Tributaries of the St. Lawrence River, including the Grasse River currently serve as refugia for freshwater mussels. Ecosystem services such as stabilization of substrates, increased structural complexity, filtering of suspended sediments, nutrient cycling, water quality improvement, increased macrobenthos densities, and increases in fish are attributed to freshwater mussels (Kreeger 2005, Metcalfe-Smith et al 1998, Spooner and Vaughn 2008, USFWS and Commonwealth of Virginia 2004, Vaughn and Spooner 2006, Vaughn et al. 2008). Of the 17 species of freshwater mussels found in the Grasse River drainage, the eastern elliptio (*Elliptio complanata*) dominates the mussel fauna (Erickson and Fetterman 1996, Erickson and Fetterman 1997, Erickson and Garvey 1997, Normandeau 2008). Less common species include New York State species of Greatest Conservation Need (NYSDEC 2012b) and species of special concern in North America (Metcalfe-Smith et al. 1998). NOAA recommends that a mussel study be conducted as part of the baseline

¹ More sediment was eroded during the 2003 ice jam event than was excavated during the 2005 ROPS.

habitat surveys to identify the location of beds and assess whether any protected species might be within the remediation zone. Habitat reconstruction efforts should consider temporarily relocating adult mussels from the remediation area to a hatchery or upstream area until they can be transplanted once the contaminated sediments are cleaned up. Alternatively or as a companion effort, juvenile mussels can be released into the river along with fish infected with glochida (larval stage of mussels).

Power Canal

The Proposed Plan does not include a remedial alternatives analysis for PCB contamination in the Power Canal but indicates that monitoring of this area will continue. NOAA's preference would have been for EPA to propose a remedial alternative, e.g., monitored natural recovery, and evaluate remedy effectiveness as part of the five-year review process.

Specific Comments

Page 2 and elsewhere: The Power Canal and Robinson Creek are initially mentioned in the Site Description section but the Proposed Plan is silent on whether these areas pose a risk to human health or the environment.

Page 2, Figure 1: This or another figure should show the site relative to Akwesasne, the Indian Meadows, Alcoa East, and the former GM site.

Page 2: The breached condition of the Massena Dam should be included in the site description.

Page 3, Bottom to Page 4, Top, "Multiple studies conducted by academic researchers have demonstrated the successful spawning, juvenile rearing, and adult population of lake sturgeon, a New York State (NYS)-listed threatened species, in the Grasse River.": Research on lake sturgeon in the Grasse and St. Lawrence Rivers have been conducted by state and federal government agencies, consultants, and academics. Sturgeon from the Grasse River, St. Lawrence River, Black River and Des Praires River comprise one of the six Great Lakes Basin genetic stocking units (Welsch et al 2010).

Page 3, What are PCBs, Box, Para 5: The focus should be expanded to include ecological as well as human health effect. PCBs are probable human carcinogens and known carcinogens in animals. PCBs also cause non-cancer health effects including adverse effects on the immune system, reproductive system, endocrine system and nervous system (EPA 2012c).

Page 4 to Page 5, Site History: The release and control of other COCs from the Alcoa West Facility should be described. A description of the National Remedy Review Board recommendations on the 2002 Grasse River preferred remedy and the subsequent studies and reports that were completed to be responsive to their recommendations should be summarized in the Proposed Plan.

Page 5, Para 2: The 2003 ice scour event eroded up to 5 feet of sediment with the greatest amount of scour occurring in pilot cell #4 where 2 feet of cap was placed (McShea et al. 2005).

Page 5, Sediment, Para 2: The estimated 355,000 cy of contaminated sediment removal in 8 years under Alternative 8 is about 46.5% less volume than the cubic yards of sediment mechanically dredged from River Section 1 of the Hudson River during the May-through November 2012 dredge season. Similarly, the estimated volume of sediment (634,000 cy) targeted for removal under Alternative 9 in 7 years is approximately 4.4% less than the volume of sediment currently dredged from the Hudson during 2012. While 350,000 cy was the target removal volume for the Hudson this year, that is still substantially higher than production estimates for the Grasse. Although conditions in the Grasse River differ somewhat from the Hudson, we believe that dredging can be done more quickly and cost-effectively than predicted, e.g., the 8 years (355,000 cy), 7 years (634,000 cy) and 18 years (1,664,000 cy) projected to complete Alternatives 8, 9, and 10.

Page 8 and Page 10: A map should identify each of the 8 the Reaches described in the Proposed Plan.

Page 11, Sediment: The 2010 Updated ERA found unacceptable risk to aquatic organisms from exposure from maximum concentrations of Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260, total PCBs, and dioxin-like PCB congeners in Grasse River sediments based on current data.

Page 11, Surface Water: The 2010 Updated ERA determined there were unacceptable risk to aquatic organisms from exposure to maximum concentrations of Aroclor 1221, 1242, 1254, dioxin-like PCB congeners, and aluminum and from mean and maximum total PCBs in Grasse River surface water.

Page 13, Second Bullet: The design of the thickness of the cap should consider the depth of rooting plants in addition to the potential for burrowing or disturbance of the cap by biota.

Page 18, Overall Protection of Human Health and the Environment, Fifth Para; and Page 20, Reduction in Residual Risk: The time to reach target fish concentrations protective of human health is compared across remedial alternatives. A similar analysis should be presented against ecological PRGs.

Page 22, Para 5: Short term impacts to aquatic and wildlife habitat from dredging are mentioned. There are also potential short- and long-term impacts from capping. Similar to dredging, some of these impacts can be mitigated through placement of a habitat layer on top of the cap.

NOAA welcomes the opportunity to offer technical assistance on this site. Should you have any questions regarding these comments, please feel free to contact me at 212-637-3259.

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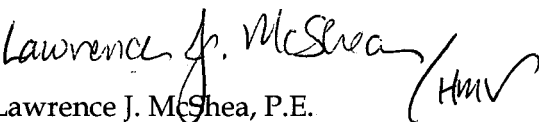
Subject: Grasse River Project
Administrative Order Index No. II-CERCLA-90229
Proposed Plan Comments

Dear Ms. Chang:

Attached are Alcoa's comments on the September 2012 Proposed Plan for the Grasse River Superfund Site. Alcoa believes that a capping remedy is protective of human health and the environment, is effective over the long term, and complements the natural recovery already occurring in the river. However after two decades of expert study and stakeholder input, Alcoa wants the process to move forward and will work with USEPA to implement the recommendation contained in the Proposed Plan (Alternative 6).

Note that we may submit additional comments as we continue our review of the subject document. Please contact me at (724) 337-5458 if you have any questions regarding this information.

Very truly yours,


Lawrence J. McShea, P.E.
Project Manager
Alcoa Inc.

cc: Douglas Fischer, New York/Caribbean Compliance Branch Alcoa Site Attorney

160770



**Grasse River Superfund Site
Comments on the Proposed Plan (September 2012)**

Below are Alcoa's comments on the Proposed Plan for the Grasse River Superfund Site dated September 2012. Alcoa appreciates the opportunity to provide these comments to the United States Environmental Protection Agency (USEPA).

1. Alcoa believes the Analysis of Alternatives Report (Alcoa, July 2012), which forms the basis for the Proposed Plan, demonstrates that alternatives that cost significantly less than Alternative 6 can achieve equivalent protectiveness. Specifically, alternatives with capping only and capping plus focused near shore dredging (Alternatives 3, 4 and 5 in the Proposed Plan) achieve similar risk reduction as measured by reductions in polychlorinated biphenyl (PCB) levels in fish and equivalent or better reductions in PCB loading to the St. Lawrence River, at costs ranging from \$129 million to \$68 million less than the USEPA preferred alternative. In view of this information, Alcoa asks that USEPA evaluate opportunities to reduce the overall project cost while maintaining the overall protectiveness of the remedy, and that USEPA structure the Record of Decision such that these opportunities can be realized during project implementation.

2. The preferred remedy includes the following element: "*Within the near shore area targeted for dredging, the goal is to remove all of the PCB-contaminated sediments within these areas, leaving a residual of less than 1 mg/kg*" (pg. 23). Experience at other sites and the site-specific pilot near shore dredging conducted as part of the 2005 Grasse River Remedial Options Pilot Study (ROPS) indicate that it is frequently difficult to meet this goal. In the ROPS, the average post-dredging residual PCB concentration in the near shore area was 1.9 mg/kg, consistent with the observation of dredging residuals at other environmental dredging sites (National Research Council, 2007; Patmont and Palermo, January 2007; Bridges et al., February 2008). Efforts to meet a residual sediment PCB concentration standard of less than 1 mg/kg could result in multiple redredging attempts that would slow the progress of the remedy with no net environmental benefit. Based on these considerations, Alcoa believes a more appropriate approach would be to develop a dredge residuals management plan for the near shore areas during remedial design that includes a specified level of effort on dredging followed by backfill or capping, consistent with the approach that has been used by USEPA at other sediment sites.

3. Alcoa has previously provided comments on the assumptions used in the human health and ecological risk assessments. These comments were included in the Human Health Risk Assessment Update (Alcoa, July 2002) and the December 12, 2011 Responses to Agency Comments on the Draft Analysis of Alternatives Report. Alcoa requests that these comments be included in the Administrative Record for the project.

4. As provided in previous comments to USEPA, Alcoa does not believe that there is a legal basis for the St. Regis Mohawk Tribe (SRMT) sediment quality criterion for PCBs to be identified as an Applicable, Relevant, and Appropriate Requirement (ARAR) for the Grasse River Superfund Site.

5. Alcoa believes that the Record of Decision should clarify that the habitat restoration plan to be developed as part of remedial design should take into consideration the fact that site-specific studies have indicated that natural recovery of habitat at the site via natural re-colonization can be an effective process for habitat restoration and that habitat restoration efforts that are undertaken as part of the remedy must be constructible, sustainable, and cost effective. The Record of Decision should also clarify that habitat restoration efforts will be limited to those areas directly impacted by remedial actions.

Alcoa also recommends that restoration first be implemented on a small scale in phases as portions of the remedy are completed, such that restoration methods can be tested for effectiveness, and lessons learned can be appropriately incorporated into other areas of the river as remedy implementation progresses. Alcoa also believes that the process should allow for the modification of the habitat restoration plan as information is developed from initial site restoration efforts based on the criteria of constructability, sustainability, and cost effectiveness noted above.

6. Consistent with the approach employed during prior in-river activities as well as USEPA guidance (USEPA, 2004), Alcoa recommends that the approach to during- and post-remedy monitoring provide the flexibility to modify the sampling program based on the evaluation of data as they are generated. The details of the during- and post-remedy monitoring plans should be developed during remedial design.
7. References to cultural significance of the Grasse River do not clearly state whether they are based on comments from the United States on behalf of SRMT or independent evaluations and conclusions by USEPA. The document also does not address the fact that Alcoa has worked diligently with SRMT and other natural resource trustees to reach a settlement providing compensation for claimed cultural impacts associated with the presence of PCBs.

References

Alcoa. July 2002. *Human Health Risk Assessment Update*.

Alcoa. July 2012. *Analysis of Alternatives Report*.

Alcoa. December 2011. Responses Agency Comments on the Draft March 2010 Analysis of Alternatives Report. Submitted via email from L. McShea (Alcoa) to Y. Chang (USEPA) on December 12, 2011.

Bridges, T., S. Ells, D. Hayes, D. Mount, S.C. Nadeau, M.R. Palermo, C. Patmont and P. Schroeder. February 2008. *The Four Rs of Environmental Dredging: Resuspension, Release, Residual, and Risk*. U.S. Army Engineer Research and Development Center, Vicksburg, MS. ERDC/EL TR-08-4.

National Research Council. 2007. *Sediment Dredging at Superfund Megasites: Assessing the Effectiveness*. Washington, D.C.: National Academy Press.

Patmont, C. and M. Palermo. January 2007. Case Studies of Environmental Dredging Residuals and Management Implications. Paper D-066 in *Proceedings, 4th International Conference on Remediation of Contaminated Sediments*, January 22-25, 2007, Savannah, GA. Battelle Press, Columbus, OH.

USEPA. January 2004. *Guidance for Monitoring at Hazardous Waste Sites: Framework for Monitoring Plan Development and Implementation*.

USEPA. September 2012. *Superfund Proposed Plan, Grasse River Superfund Site, Massena, St. Lawrence County, New York*.



Alcoa

Alcoa Corporate Center
201 Isabella St at 7th St Bridge
Pittsburgh, PA 15212-5858 USA
Tel: 1 412 553 2521
Fax: 1 412 553 1402

November 29, 2012

SENT VIA UPS OVERNIGHT

Ms. Young Chang, Remediation Project Manager
U. S. Environmental Protection Agency, Region II
Emergency and Remedial Response Division
290 Broadway, 20th Floor
New York, NY 10007-1866

RE: Grasse River Project
Administrative Order Index No. II-CERCLA-90229
Proposed Plan Comments

Dear Ms. Chang:

Given the brief recently filed by the U.S. Attorney General's office in support of the St. Regis Mohawk Tribe's ("SRMT") position in litigation involving claims on lands in the vicinity of the lower Grasse River, Alcoa wishes to augment and clarify its comment number 4 submitted by letter dated October 24, 2012.

The above-referenced Proposed Plan states as follows: "Because it is doubtful that the SRMT sediment standard can be achieved, and may therefore need to be waived due to technical impracticability if it is identified as an applicable or relevant and appropriate requirement (ARAR), EPA does not believe that the SRMT sediment standard would necessarily lead to a remedy that is different from the preferred remedy in the Proposed Plan." (emphasis added)

Alcoa believes the Record of Decision should clarify this language and any other language concerning the SRMT sediment standard to be more specific and more definitively ensure finality of the selected remedy regardless of the outcome of various legal proceedings concerning land claims by the SRMT. The Record of Decision should clarify this by including a statement that there is no legal basis for the SRMT sediment quality criterion for PCBs to be identified as an Applicable, Relevant,

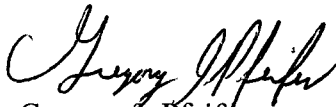
160771



Ms. Young Chang, Remediation Project Manager
U. S. Environmental Protection Agency, Region II
November 29, 2012
Page Two

and Appropriate Requirement (ARAR) for the Grasse River Superfund Site, even if SRMT were to prevail in its claims regarding land in the area. In addition, the Record of Decision should revise the above language from the Proposed Plan to eliminate the terms shown in emphasis and thereby eliminate the potential uncertainty they could create.

Very truly yours,



Gregory J. Pfeifer
Counsel

cc: Douglas Fischer, New York/Caribbean Compliance Branch Alcoa Site Attorney
Young Chang, via both facimile to (212) 637-3966 and email to Chang.Young@epa.gov

Date:

10/9/12

Your Name and Address:

JOHN A. MURRAY

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for Alternative Six and the quick remediation of the Grasse River.

A capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. While the recommendation contained in the PRAP goes beyond capping, I urge the EPA to move forward with Alternative Six.

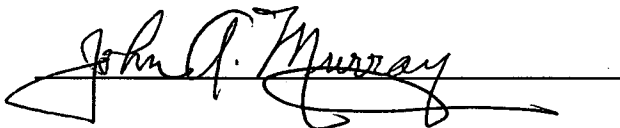
The cleanup of the river has been studied for two decades with lots of involvement from agencies and people in the community, now it's time to move forward.

As a North Country resident I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest private employer in the North Country and a major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. Alternative Six achieves both.

Again, I strongly support Alternative Six and the quick remediation of the Grasse River.

Sincerely:



160785





ALCOA PRAP Comment

Matthew Thompson

to:

Young Chang

10/16/2012 10:29 AM

Hide Details

From: Matthew Thompson <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

Follow Up:
Urgent Priority.

History: This message has been replied to.

1 Attachment



ALCOA PRAP Comment Letter.pdf

She:kon/ Greetings Young,

Please accept the attached document as my official comment to the proposed ALCOA remedial action plan.

Niawen/ Thank you,

Matthew V. Thompson

Matthew V. Thompson

U.S. FOIA Exemption 6 Redaction



Kentenha/ October 16, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
Fax: (212) 637-3966
Email: chang.young@epa.gov

She:kon/ Greetings Young,

I am a lifelong member and resident of Akwesasne. I have fished my whole life on the St. Lawrence River including all of the local tributaries. In my youth I even did extensive fishing on the Grasse River before 1989 and the subsequent fish advisory was released. I have thus seen the dramatic effects of the pollution ALCOA has released into the waters and I am very pleased to finally see a potential clean up solution.

That being said I do not agree with the proposed remedial action plan (PRAP) that the EPA has chosen. After reading all of the documents that lead up to the PRAP, I believe there is one major factor that cannot be overlooked. To me not knowing how ice scouring is going to affect the river below T21 is a major variable that I am not comfortable with. If ice scouring were to occur between T21-T72, all of the cap placed in this section would be removed where the scour occurred and PCB's that were supposed to be capped would be re-released into the water column, and potentially resettle on top of cap further downstream.

In the current world of climate change to try to manage and predict the zone of ice scouring, and to say it is most likely to occur only in zone T1-T21 is foolish and unrealistic. The EPA should look at a more logical solution and be prepared for ice scouring along the entire stretch of the site area from T1-T72.

Based upon all of the data collected thus far I feel the most appropriate remedial action plan is one that has not been presented. It is simply an addition to Alternative 6. The best remedy is: T1-T72 NS Dredging and Backfill to grade, T1-T72 MC Armored capping. This alternative has removed MC dredging which has proven to be very costly and potentially not that effective. Also this remedy removes the dangers of ice scours by armor capping the entire main channel. As with alternative 6, the rest of the conditions would be the same with respect to NS dredging and long term monitoring of the site.

If you have any questions please do not hesitate to call

U.S. FOIA Exemption 6 Redaction

Niawen/ Thank you,

**Matthew
Thompson**

Digitally signed by Matthew
Thompson
DN: cn=Matthew Thompson, o, ou,
email=matthew.thompson@srmt-
nsn.gov, c=US
Date: 2012.10.16 10:23:54 -04'00'

Matthew V. Thompson
Akwesasne Tribal Member



**Proposed Remediation of the Grasse River - Superfund- Letter Dated
October 1, 2012**

Marilyn White to: Young Chang

10/17/2012 08:05 PM

From: Marilyn White <U.S. FOIA Exemption 6 Redaction>
To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Chang,

I have received your letter dated October 1, 2012 regarding the Proposed Plan, Grasse River Superfund Site, Massena, St. Lawrence County, New York.

Here are my comments.

1. I agree with the dredging of all contaminated areas. I do understand that with dredging that contaminants may be dispersed.
2. I do NOT agree with capping of any of the sites on the Grasse River. The whole river should be dredged. In my research, this is what is recommended,
3. All the PCBs should be removed by dredging and capping is NOT an answer to this.
4. I live on the Grasse River. The ice moves in and out and it may disturb the "caps". I just want Alcoa to take out all the PCBs that they have left over the decades with their industry.
5. I know the EPA or Alcoa has manually broken the ice in the past and this does not set well with me. The ice going out of the river is a normal "cleaning" of debris from the river. By the breaking of the ice prematurely disturbs the normal cleaning of the river from organic material. I know you worry about the ice "disturbing the caps"...but if there were no caps, this would not be an issue.
6. I've been told by the EPA that they break the ice prematurely to prevent "scouring" of the caps of PCBs. I just want the PCBs out of the Grasse River.
7. Charles Schumer (probably spelled his name wrong) wants you to act fast, but I do not want you to act fast. I want you to clean up the Grasse River for me and my children and grandchildren. We swim in it!
8. I am leaving you my name, address and phone number and email, if you want to contact me. I did not see anything about public meeting times in this letter, but I hope you let me know. Let me know if any meetings are in the works...I'll be there.

Marilyn White

U.S. FOIA Exemption 6 Redaction

I'm hoping the EPA is on my side,

I will forward this to any concerned parties and attorneys, because I am disclosing my intentions.

Thank you,

Marilyn White

Date: _____

Name and Address: _____

Roger D. Shaw

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

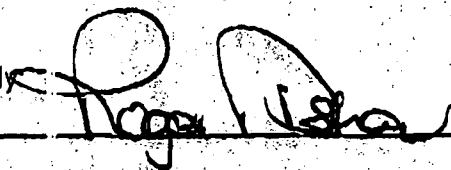
Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

As an Alcoa employee I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,100 hardworking men and women. The Grasse River remediation is important to everyone at Alcoa.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely,



Date: 10-17-12

U.S. FOIA Exemption 6 Redaction

Name and address Riley G. Adams

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also a reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

As an Alcoa employee I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,100 hardworking men and women. The Grasse River remediation is important to everyone at Alcoa.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely:

Riley G. Adams



Alcoa/Grasse River Cleanup
Peets, Darren J. to: Young Chang

10/18/2012 01:44 PM

From: "Peets, Darren J." <Darren.Peets@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Ms. Chang,

I am writing you to show my support for Alcoa and the plan to clean up the Grasse River here in Massena. I have lived here all 41 years of my life. My father retired from Alcoa. My brother, nephews, uncles and many cousins all work for Alcoa. I have worked at Alcoa for the past 14 years and spent 2 summers working in the Summer Program at the East Plant when it was Reynolds Metals. Prior to working at the plant I worked for Toomey Bros Logging which practiced environmentally friendly logging to protect and preserve the Adirondack State Park. I am very concerned about the Environment and Alcoa and how one may impact the other on this important decision. While I personally do not agree with the proposed plan, I believe capping is the best solution as opposed to stirring up what is harmful, I also feel as an Alcoa a certain responsibility to ensure that future generations will be able to enjoy our waterways here in the North Country. It has been 20 years. It is time to start cleaning up the mess. I understand why compromises have been made and therefore whole heartedly support the Plan to clean up the Grasse river and urge the decision be made as soon as possible. For the good of the Grasse River, Alcoa, Massena and the surrounding communities.

Respectfully yours,

Darren Peets
Line 1 Process Flow Leader
Alcoa Massena East Plant
315-764-6339



Grasse River Remediation
Rombough, Steve M. to: Young Chang

10/18/2012 06:05 AM

From: "Rombough, Steve M." <Steve.Rombough@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Follow Up: Urgent Priority.

Remedial Project Manager Chang,

Good morning Ms. Chang, my name is Steve Rombough and I am a born & raised Massena, NY resident, an Alcoa employee and the Manufacturing Manager at the Massena West Primary Metals Plant.

I write to express my strong support for a Grasse River Clean-up plan that is based on sound science.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by the EPA is also a reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of the remediation effort.

As an Alcoa employee and someone born and raised in Massena, NY, I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena. The company provide jobs for more than 1,100 hardworking men and women. The Grasse River remediation is important to everyone at Alcoa.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. After many years of strong scientific studies and the collection of valuable data, it is time to move forward with the proposed solution.

Sincerely,

Steve Rombough

VILLAGE OF MASSENA

Town Hall Building
Massena, New York 13662

FAX#: 769-0257
TDD: 711
AREA CODE (315)
www.massenaworks.com

October 18, 2012

MAYOR'S OFFICE

Mayor: James F. Hidy
TOWN HALL - ROOM 11
60 MAIN STREET
769-8625 Ext 246

CLERK'S OFFICE

Village Clerk: Patricia M. Dumas
TOWN HALL - ROOM 12
60 MAIN STREET
769-8625 Ext 232

TREASURER'S OFFICE

Treasurer: Julie A. Sharlow
TOWN HALL - ROOM 10B
60 MAIN STREET
769-7052 Ext 231

WATER DEPARTMENT

Dep.: Laura Gagne
TOWN HALL - ROOM 10
60 MAIN STREET
769-7052

PUBLIC WORKS DEPARTMENT

Superintendent: Hassan Fayad, P.E.
85 ROBINSON ROAD
769-6823

POLICE DEPARTMENT

Chief: Timmy Carrier
TOWN HALL
60 MAIN STREET
769-3577

FIRE DEPARTMENT

Foreman: R. Shawn Gray
34 ANDREWS STREET
769-2380

RECREATION DEPARTMENT

Superintendent: Rich Boprey
180 HARTE HAVEN
769-3161

BUILDING DEPARTMENT

C.E.O.: Greg Fregoe
TOWN HALL - ROOM 8B
60 MAIN STREET
769-6803

HOUSING PROGRAM

Coordinator: Peter Divine
TOWN HALL - ROOM 8C
60 MAIN STREET
769-6803

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
New York, NY 10007-1866

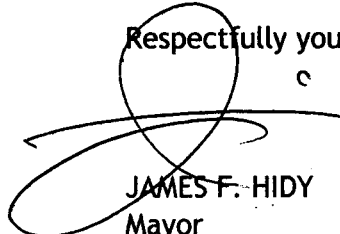
Dear Ms. Chang:

I am writing to convey my strong support to the ALCOA / Grasse River remediation project.

As mayor of a community that has been the home to one of the largest employers of the North Country, I could not begin to illustrate how devastating this region would become without ALCOA's presence. ALCOA and the vast number of families its fed over the years continues to be the lifeline of what remains after the downturn in the economy that claimed General Motors Corp. and Reynolds Aluminum Inc. also major contributors to a once thriving community.

Without a doubt, the cleanup of the Grasse River is of great importance as it should be. However, it should be done in a most cost effective way that protects human health, the environment and ALCOA's commitment to continue operations in Massena. This region needs the jobs.

Respectfully yours,



JAMES F. HIDY
Mayor

/JFH



Grasse River Remediation
Hughes-LePage, Linda J.

to:

Young Chang

10/19/2012 02:13 PM

Hide Details

From: "Hughes-LePage, Linda J." <Linda.Hughes-LePage@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

Remedial Project Manager Chang:

I would like to express my support for the proposed Grasse River cleanup recommended by the EPA.

Years of study have shown that a capping remedy meets the overall goal, which is to reduce PCB levels in fish and other organisms in the river with a resulting long-term protection of human health and the environment. While I feel that is the ideal solution, I strongly believe that it is more important to move forward on this cleanup. That is why I support the EPA's recommendation.

As a 30 year employee of Alcoa, I understand the importance of Alcoa's presence to this community and to the North Country. Alcoa provides jobs to 1,100 employees directly, and to many businesses indirectly. The Grasse River remediation is an important step towards keeping the community, the environment and Alcoa healthy and viable.

Everyone benefits from a cost-effective remedial plan that protects health and environment. Please move this process forward as soon as possible.

Sincerely,
Linda Hughes-LePage

10/24/2012



Grass River
stacy Ashley-Parent

to:

Young Chang

10/19/2012 06:45 PM

Hide Details

From: stacy Ashley-Parent <U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

I'm a member of the Massena community and have family that works at Alcoa. I support the remedy that EPA proposed in the PRAP because I believe that it will reduce the human exposure and risk associated with PCBs, while maintaining the cost to do so within a range that allows Alcoa to Modernize and remain a source of employment in Northern NY. As a US Citizen and concerned stakeholder, I am requesting that EPA move forward with the final remedy (ROD) as soon as possible, but no later than March 2013 when Alcoa's board must decide on the future of The Massena Plants. Stacy Ashley-Parent

10/24/2012



Grasse River Remediation
Richard Byrne to: Young Chang

10/19/2012 06:54 PM

From: Richard Byrne U.S. FOIA Exemption 6 Redaction
To: Young Chang/R2/USEPA/US@EPA

Dear Mr. Chang:

I am in support of accepting the plan submitted by EPA-for the remediation of the Grasse River in Massena, New York.

Fishing is a staple of life in Massena and its surrounding areas. While I can appreciate the reticence of some stakeholders allowing remediation that you do not feel is effective, I believe that if you review the data which shows that there is a layer of bedrock below the soil, you would agree that a remediation plan that includes all dredging would be physically impossible and elevate contamination levels for years to come.

I recommend that this stalled project move forward timely, by March 20, 2013.

Tank you for the chance to review my suggestions and comments.

Richard Byrne

Sent from my iPad



Grasse River Remediation
Richard LePage

to:

Young Chang

10/21/2012 12:55 PM

Hide Details

From: "Richard LePage" <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by the EPA is also a reasonable approach.

The process must move forward so our community can begin experiencing the benefits of this remediation.

As a 39 year Alcoa employee, I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,100 men and women.

The community deserves a clean Grasse River and Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely,
Richard LePage

10/24/2012

Dear Sir,

I do not agree with the riverbed dredging in the Grass river in Messina. The dredging would cause the spread of the sediment all down the Grass river & into the St. Lawrence river.

I believe capping the sediment with clean sand & gravel would be the best way to go.

Sincerely

Franklin E. Eldredge

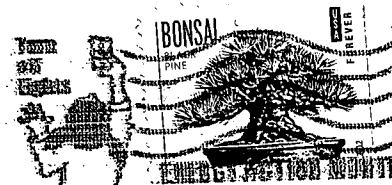


Mr. Franklin E. Eldridge
U.S. FOIA Exemption 6 Redaction



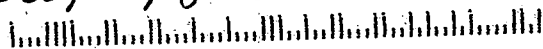
SYRACUSE NY 130

22 OCT 2012 PM 2 L



Young S. Chan
Remedial Project
Manager, US Environmental
Protection Agency
290 Broadway 20th Floor
New York N.Y. 10007-1866

10007186699





Grasse River Cleanup PRAP
Lucey, Derrick W. to: Young Chang

10/22/2012 07:36 AM

From: "Lucey, Derrick W." <Derrick.Lucey@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

1 attachment



Picture (Device Independent Bitmap) 1.jpg

Dear Young,

I am an Alcoa employee in Massena, NY. I have been employed for about 6 years and Alcoa has played an important part in my life for many more years as family members including my father-in-law and my grandfather were both career Alcoa employees. After having sat through an informational meeting on the proposed remediation action plan that was put forth by the EPA, I just wanted to express my support of the proposed cleanup.

As a scientist (Ph.D Inorganic Chemistry) and an avid outdoor enthusiast, I really do not understand why the suggested cleanup doesn't involve less dredging as it appears the dredging process stirs up PCB's and increases the levels in fish tissues. My belief is that we should cap the contamination with a sufficient layer of material so that the PCB levels in the river do not get re-entrained. There is scientific evidence that the capping works with armored capping where necessary to avoid the ice jam incident that occurred in 2003. But with this said, I am confident that you took everything into consideration when you developed the PRAP so my vote is that we get started fixing this river as soon as possible. It is going to take about 7-8 years from completion of the project for the PCB levels in the fish to drop to the appropriate levels for them to come off of the unsafe to consume list.

Thanks,
Derrick
Derrick W. Lucey, Ph.D
Massena Technical Manager

Alcoa Primary Metals
Massena West Electrode
Park Avenue East
Massena, NY 13662-0500 USA
Cell: 1 315-296-6605
Fax: 1 315-764-4736
Derrick.Lucey@alcoa.com



Grasse River PRAP
Alvarez, Marcela to: Young Chang

10/22/2012 09:50 AM

From: "Alvarez, Marcela" <Marcela.Alvarez@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

1 attachment



Picture (Device Independent Bitmap) 1.jpg

Dear Mr. Chang,

As an Alcoa employee, I want to express my support for the Grasse River cleanup and the fact that the EPA is moving forward with the project and has proposed a remediation plan. This is not only going to help the environment, our health, but it is also going to benefit the community in Massena. As Alcoa being the largest employer in Massena, Capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. Alcoa wants the process to move forward and will work with the EPA to implement the recommendation contained in the PRAP.

Thank you,

Marcela Alvarez
TICoE Rotational Engineer
Massena Operations
(865) 335-7614
[cid:image002.png@01CB8198.AA395FD0]



Grasse River Cleanup
Salgado, Janette to: Young Chang

10/22/2012 03:14 PM

From: "Salgado, Janette" <Janette.Salgado@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Dear Young S. Chang,

As an Alcoa employee, I want to express my support to the Grasse River clean up. We are excited that the plan is moving forward after two decades of expert study so that the community can begin experiencing the benefits of the remediation. Thank You.

Sincerely,

Janette Salgado



Grasse river
David O'CONNELL
to:
Young Chang
10/23/2012 09:27 AM
Hide Details

From: "David O'CONNELL" <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

From: David A O'Connell

U.S. FOIA Exemption 6 Redaction

To: Chang Young

I live on the Grasse river and support the the recommendation contained in the PRAP, given to ALCOA to clean up the Grasse River. I have a home and have lived on the river for 12 years. I see this recommendation as positive way to have a clean river with a cost effective solid plan. The river is important and so is ALCOA to the community. This is a very postive and responsible plan and it needs to move forward. It has been a lot of years in the study and now is the time to move forward.

Thank you

David A O'Connell

10/24/2012



Grasse River Clean up

David O'CONNELL

to:

Young Chang

10/30/2012 10:01 AM

Hide Details

From: "David O'CONNELL" <[REDACTED]>

To: Young Chang/R2/USEPA/US@EPA

TO: Young S. Chang

From: David A O'Connell

[REDACTED]

I live on the Grasse River in Massena N.Y. and I fully support the Grasse River cleanup plan proposed to ALCOA by the EPA. I believe the years of study by competent people have come up with a very workable plan that address the problem in a cost effective way. I think enough time and study have been put into this plan and it is time to move forward. ALCOA is very important to the community and so is the river. I think the plan address both in a very positive way.

Thank You

David A O'Connell

10/30/2012

to: Young S Chang

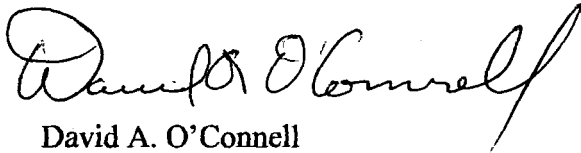
10/30/2012

From: David A. O'Connell

U.S. FOIA Exemption 6 Redaction

I live on the Grasse River in Massena N.Y. and I fully support the Grasse River clean up plan proposed to ALCOA by the EPA. I helive the years of study by competent people have come up with a very effective and long term solution and in a cost effective way. I think enough time and study have been put into this plan, and it is time to move forward and implement it. ALCOA is crucial to the Massena area and every effort to keep them here is needed.

Thank You



David A. O'Connell

U.S. FOIA Exemption 6 Redaction

Date:

10/23/12

Your Name and Address:

Cindy Beckhill

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for Alternative Six and the quick remediation of the Grasse River.

A capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. While the recommendation contained in the PRAP goes beyond capping, I urge the EPA to move forward with Alternative Six.

The cleanup of the river has been studied for two decades with lots of involvement from agencies and people in the community, now it's time to move forward.

As a North Country resident I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest private employer in the North Country and a major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. Alternative Six achieves both.

Again, I strongly support Alternative Six and the quick remediation of the Grasse River.

Sincerely:

Cindy Beckhill



Alcoa and the Grasse River clean-up

Jrmchoice

to:

Young Chang

10/24/2012 02:10 PM

Hide Details

From: <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

Follow Up:
Urgent Priority.

Sir: My name is Roy F. Mittiga Sr., I am 88 years old. I have lived in Massena, N. Y. all my life. I have many memories of the area and the Grasse River. When, I was a young boy, my friends father was the manager of the Mica Plant, located on Center Street next to the Grasse River. My friend and I would often go to the Mica Plant and on occasion wander onto the Grasse River in our bare feet. The waste Mica was thrown out in large quantities. So large that we would be standing on Mica way over a foot deep. It covered a very large area of the river bottom. There are many factors that have contaminated the Grasse River, including the Grist Mill across from the Mica Plant. and more. I cannot blame Alcoa for the total contamination of the river bed downstream. All through out past history they used that river as a dumping place, even before Alcoa located here in Massena, N. Y. They removed ice from the river in the early spring by the Horton Ice Company, we children were advised not to eat the ice from the ice trucks as they made delivery to the homes, because of the contamination of the river. So, why blame Alcoa for all the ills of the river, I ask? Thank you for your time reading this. Roy F. Mittiga Sr.

John M. Wicke

U.S. FOIA Exemption 6 Redaction

October 25, 2012

Young S. Chang

Remedial Project Manager

U.S. Environmental Protection Agency

290 Broadway, 20th Floor

New York, NY 10007-1866

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

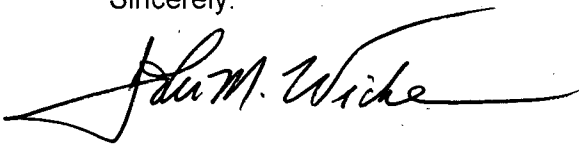
Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also reasonable approach.

As someone who cares deeply about the Massena community and this important waterway, I believe the outcome of the EPA's process is of utmost importance. After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

The community I live deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Thank you for your time and consideration.

Sincerely:



John M. Wicke

Former Village Trustee, Village of Massena

Former Town Councilman, Town of Massena

Former Past President of the St. Lawrence County Chamber of Commerce



EPA Proposed Remedial Action Plan for Grasse River
Martin, John D. to: Young Chang

10/25/2012 07:06 PM

From: "Martin, John D." <John.Martin@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Project Manager Chang,

Hello Ms. Chang, my name is John Martin, and I am the Location Manager for the Alcoa plants in Massena, NY. We met during one of your visits to Massena. I am writing today, not in my role as Location Manager, but as a resident who lives on the Grasse River, and a proud American who wants what is best for our country. My family and I care deeply about both properly cleaning up the Grasse River and responsibly maintaining a manufacturing base for a strong U.S. economy.

I live on the Grasse River and enjoy fishing, boating, kayaking, and swimming activities and believe it is one of the nicest recreational rivers anywhere. I want a comprehensive solution that gives us the most reduction of PCB levels in fish tissue, the least intrusive to the residents, birds, and animals during the remediation process, and creates long term sustainability for the Grasse River ecosystem.

I support the EPA's proposed remedial plan for the Grasse River Clean-up because it is based on sound science. Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term, and complements the natural recovery already occurring in the river. Although I believe the capping only option is still the best overall solution, the alternative recommended by the EPA is a reasonable approach.

After nearly two decades of expert study and stakeholder input, I believe the process must move forward so our community can begin experiencing the benefits of the remediation effort. It is also important to get a final decision so that Alcoa can properly plan both the remediation of the river and modernization of its facilities. Alcoa is the largest employer in the Massena area and contributes \$340M annually to the North Country economy and provides jobs for 1,100 hardworking men and women.

The community deserves a clean Grasse River and Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Thank you for all your efforts as Project Manager, and thank you for reading my feedback. My family and I look forward to many years of enjoyment and beauty the Grasse River provides.

Sincerely,

John Martin



Support for EPA PRAP - Grasse River - Massena, NY
O'Connell, Robert J. to: Young Chang

10/25/2012 03:11 PM

From: "O'Connell, Robert J." <Robert.O'Connell@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

To:

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

My name is Robert O'Connell and I was born and raised in Massena, NY. I currently live in Massena with my wife and three children. I am also a third generation Alcoa employee, as both my Grandfather and Father were Alcoa employee's. I have also had many relatives work for Alcoa both in Massena and Pittsburgh. To say the least, Alcoa has provided for my family for many years, and we have provided Alcoa with quality employee's to help ensure their success. The reason for this letter is to tell you that I support the Proposed Remedial Action Plan for the Grasse River and urge you to issue a Record of Decision based upon the PRAP, without modification, as soon as practical. The two main reasons I support this is to properly address the environmental PCB contamination in the Grasse River, and to ensure that Alcoa remains in Massena for generations to come. Another reason that I support this PRAP is that my Father and Mother currently reside on the Grasse River and we utilize it for recreation and enjoy its beauty when visiting them on a routine basis. We would like to maintain that enjoyment, and feel that the remedy proposed will allow us to do so.

Thank you for considering my opinion.

Respectfully,
Robert J. O'Connell
Robert J. O'Connell
Alcoa Massena Primary Products
315-323-3904 Cell
315-764-4189 Office
robert.o'connell@alcoa.com

Mr. Young S. Chang, Remedial Project Manager

U. S. Environmental Protection Agency

290 Broadway, 20th Floor

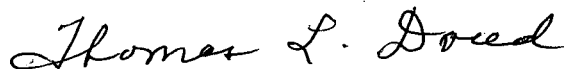
New York, N Y 10007-1866

Re: Proposed Cleanup of The Grasse River.

Since I will be unable to attend any meetings regarding the proposed \$243 million plan set forth by the U. S. E. P. A. for remediation of the Grasse River, I would like to voice my support.

Thank you for the opportunity to voice my opinion.

Sincerely

A handwritten signature in cursive script that reads "Thomas L. Doud".

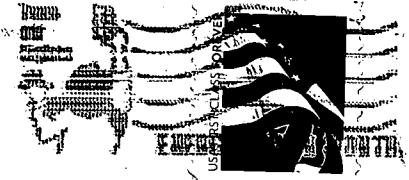
Thomas L. Doud.

Mr. Thomas L. Doud

U.S. FOIA Exemption 6 Redaction

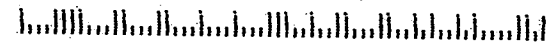
SYRACUSE NY 130

25 OCT 2012 PM 2 L



Mr. Young S. Chang
Project Remedial Manager,
U. S. Invironmental Protection Agency
290 Broadway 20th Floor
New York, N Y 10007-1866

10007186699





Grass River Project

Seguin, Brenda L. to: Young Chang

10/26/2012 06:14 AM

From: "Seguin, Brenda L." <Brenda.Seguin@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Date: 10/25/2012

Name and Address: Brenda Lee M. Seguin

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is a reasonable approach.

As an Alcoa employee and someone who has lived near this important waterway, the outcome of this process directly affects me and my family. After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,100 hardworking men and women. The Grasse River remediation is important to everyone at Alcoa. The community deserves a clean Grasse River and Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely: Brenda Lee M. Seguin



Grasse River Cleanup (Massena, NY)

Gary Novosel

to:

Young Chang

10/26/2012 08:35 AM

Cc:

Gary Novosel

Hide Details

From: Gary Novosel U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Cc: Gary Novosel U.S. FOIA Exemption 6 Redaction

Please respond to Gary Novosel U.S. FOIA Exemption 6 Redaction

26 October, 2012

I am writing to you as a citizen of Massena to voice my support for the cleanup option proposed for the Grasse River in Massena, New York; combined capping and dredging.

I feel that this approach is appropriate as it seems to provide a good balance of removing and isolating the contamination while not further stirring up more contamination in the river.

Time is of the essence. This process has dragged on way to long. Let's get a move on with this process and let the remediation begin. It is vital to the North Country first and foremost to deal with the contamination and additionally to guarantee the future of Alcoa in this area and the economic benefit that this provides to us all.

Thank you,

Gary Novosel

U.S. FOIA Exemption 6 Redaction



Grass River Cleanup
Cusworth, Lucas E. to: Young Chang

10/26/2012 08:38 AM

From: "Cusworth, Lucas E." <Lucas.Cusworth@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Mr. Chang

I have lived in Massena all my life(32 yrs) and have worked for ALCOA for 7. I support your proposal for Grasse river cleanup.

Lucas Cusworth

U.S. FOIA Exemption 6 Redaction





Alcoa and the Grass River Clean-up
LaClair, Timothy P. to: Young Chang

10/26/2012 08:45 AM

From: "LaClair, Timothy P." <Timothy.LaClair@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

As a life-time citizen of Massena, NY, I fully support the EPA proposed Grass River clean-up plan. I feel this is an excellent long-term solution to fix any contamination that may exist in the river.

Sincerely,

Tim LaClair

Massena resident and Alcoa employee



Support for Grasse River Cleanup || Remedial plan to move forward
Huczal, Heath S.

to:

Young Chang

10/26/2012 10:46 AM

Hide Details

From: "Huczal, Heath S." <Heath.Huczal@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

Young S. Chang, Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
Fax: 212-637-3966
Email: chang.young@epa.gov

Dear Young,

I am a third generation Alcoan and I have worked at the Massena plant for over 20 years, 17 of which was in the environmental department working as the Lead PCB analyst. I was involved in the original wastewater pilot treatment studies for the outfalls, cleanup activities for our super-fund sites, and served in the last two pilot studies for the Grasse River, as well as a variety of other roles over my career with the environmental department. Due to the age of our plant, current river conditions, strives we have taken to ensure no new contaminants reach beyond our borders, and data collected over the past years, I feel that leaving the sediments in place and capping is the best solution to the current problem in order to the meet goals set for reaching the reduced levels of contaminants in the river. I also feel that this will be effective over the long term and will promote the natural recovery already occurring in the river. Additionally I reviewed the alternative recommended by EPA and found it to be a reasonable approach as well.

Alcoa, Massena Operations has been a major presence and supporter of the community providing jobs and funding for many local organizations and is the largest employer in Massena. I support the Grasse River cleanup plan that is based on sound science and is also cost-effective, that protects human health and the environment.

I would like to see the remedial plan and cleanup process move forward.

Sincerely,

10/26/2012

HH

Heath Huczal

Massena Operations

East Plant Office: (315) 764-6227

East Fax: (315) 764-6366

West Plant Office: (315) 764-4368; actnet:8-240-4368

West Fax: (315) 764-4329; actnet 8-240-4329

Mobile: (315) 854-4812

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Support for Alcoa Remediation Proposal
Nicholson, Dale C. to: Young Chang

10/26/2012 09:28 AM

From: "Nicholson, Dale C." <Dale.Nicholson@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Mr. Chang,

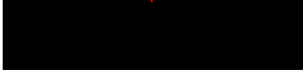
This letter is to express my support for the remediation proposed for the Grasse River in Massena. The recommended action plan seems like a reasonable way to contain the existing PCB's and protect the aquatic wildlife there. While more extensive options are available, the benefits don't increase with the costs of those options.

Alcoa has a finite amount of money available, and would like to use it to modernize the East Plant. This project is crucial to the long-term survival of manufacturing in Massena. Without it there will be very little left to support this region. As of January I will have worked here for 15 years, and have at least 15 years to go before I am in a position to retire. I very much enjoy living here with my family, and employment with Alcoa makes that possible. I would like to see this relationship continue.

EPA approval to move forward with this remediation plan will be appreciated.

Thank you,
Dale C. Nicholson, PE, CMRP

U.S. FOIA Exemption 6 Redaction





Letter to EPA on Grasse River Remediation

Mast, Peter D.

to:

Young Chang

10/26/2012 11:34 AM

Hide Details

From: "Mast, Peter D." <Peter.Mast@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



Grasse River Letter.pdf

Mr. Chang,

Attached are my written comments concerning the Grasse River Remediation plan. I hope that you consider these in your review of the plan and subsequent actions. Also please note that while I am an Alcoa employee, these comments are written on behalf of myself and my family as residents of Massena. They are not to be considered official comments from Alcoa.

Thank you,

Pete Mast, CMRP

A Alcoa Primary Metals

Maintenance Operational Excellence Leader

Massena Operations, West Plant

Office: (315) 764-4905 or ACT 240-4905

Mobile: (315) 296-7126

Peter.Mast@Alcoa.com

10/26/2012

Peter Mast

U.S. FOIA Exemption 6 Redaction



Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Mr. Chang:

I am writing to support the quick decision and implementation of a Grasse River cleanup plan affecting the citizens within and near to Massena, NY. Though I have only lived in the region for about a year, this is a very important issue to me. My family lives directly on the Grasse River, and my wife and I are both employees of Alcoa, Massena Operations. We clearly see the needs of a solution that adequately removes the threat of PCB's in our water stream, as well as the positive economic impact that Alcoa provides to the community.

Though not an environmental expert, I do hold a degree in engineering and have taken the time to review the solutions proposed for remediation. I have personal concerns about any solution that disturbs and agitates the PCB's that have already settled into the river bed. It has taken over twenty years for the PCB contamination levels within the Grasse River fish to drop to as low as they are today. That is not a clock that I want to see reset. Though the proposal to dredge instead of cap selected areas near the river banks concerns me, I understand the potential risk of these areas being disturbed by natural means. I believe that is vitally important that we avoid any solution, however, with increased levels dredging. The community and the environment cannot wait another 20 years for these contaminants to settle again.

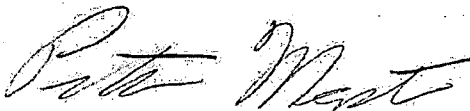
The other issue at hand is the economic benefit that Alcoa has to the region. With the closure of the GM Engine plant, Alcoa has now become the lone commercial economic driver for the community, providing over 1,000 jobs to the area. This dwarfs all but NYPA and the U.S. Border Patrol and is the specific region why my family relocated to the region. The company has clearly indicated its desire to invest significantly into the Massena East plant. But any corporation would be ill-advised to invest into a location with such a significant liability as the Grasse River Remediation being held in an undecided condition. Alcoa has shown impressive levels of cooperation in this effort and has publically supported the EPA's recommend solution despite initially recommending a capping-only approach. I beseech the Agency to move as quickly as possible to lock down this solution, allowing Alcoa's Executive Council to recognize Massena as a location worth investing and growing.

Young S. Chang
October 26, 2012
Page 2

In the course of the EPA's public hearings and community input period, I have no doubt that there will be individuals or groups who allow an emotional response to the proposal to cloud their judgment. They may very well believe that the solution with the highest price tag must be the most effective one. Fifteen years of scientific study by Alcoa and external experts indicate, however, that capping the river bed provides an extremely effective long-term solution that complements the natural recovery of the river without the short-term detriment of agitating the PCB's within the riverbed. Fully dredging the river not only wastes money, but clearly is not the best environmental solution. Scientific evidence should be driving this decision, not emotion and politics.

In summary, I encourage the EPA to move quickly to implement the solution recommended by your agency to cleanup and remediate the Grasse River. You have Alcoa's cooperation and the Massena community deserves needs both the economic investment Alcoa is willing to make and a clean, safe Grasse River.

Sincerely,



Peter Mast



Grasse River Clean Up Project

Timothy Kass

to:

Young Chang

10/26/2012 01:42 PM

Hide Details

From: Timothy Kass

J.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Timothy H.
Kass, MS,
CIH, CSP

J.S. FOIA Exemption 6 Redaction

Dear Ms. Chang,

I am writing this email to express my support for ensuring that the Grasse River is cleaned up in a safe, sound and responsible manner.

I have a vested interest in this project on many levels. First, I with my family live near and utilize the river for recreational use. Second, I have spent the majority of my working career in the environmental, health and safety field. And, finally, I am an Alcoa employee (although relatively new to the company having only hired on in August 2011).

I appreciate the many years of scientific study done on the river to determine the various options to clean up the PCB's that had accumulated. Determining the best option is a difficult decision because you always wonder if there is some more knowledge out there that's yet to be discovered (to which the answer is always yes) that will significantly change or affect any decision made now (to which the answer is not always). In a perfect world, all of the PCB's would be removed, but the world is not perfect. We make decisions based on the best knowledge that can be obtained at the time.

The Grasse River is an important resource to the area and Alcoa, who would bear the cost of the cleanup, is

10/26/2012

likewise a important employer to the area. While the community deserves a clean river, Alcoa should only have to bear the burden of a cost-effective remedial plan that protects human health and the environment.

It is time to move forward with a plan from these near two decades of expert study and input from many people so that the community can begin experiencing the benefits of the remediation. I have reservations about dredging because it would release PCB's from the soil into the ecosystem, not only here, but downstream. So, I tend to want to leave the material in place by capping it. This is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. However, I can see where some areas (due to the level of contamination) might be worthwhile removing. This makes the option recommended by the EPA a reasonable alternative.

I fully support this reasoned approach and am against the more radical remediation options.

Please move forward with this project so everyone may benefit.

Sincerely,

Timothy H. Kass



**Alcoa and the Grasse River Clean Up
Lakins, Tammy L. to: Young Chang**

10/26/2012 04:38 PM

From: "Lakins, Tammy L." <Tammy.Lakins@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

1 attachment



Picture (Device Independent Bitmap) 1.jpg

October 26, 2012

From: Tammy L. Lakins

U.S. FOIA Exemption 6 Redaction



Dear Mr. Young Chang,

I am writing to express my support for the Grasse River cleanup proposed plan. As someone who utilizes this waterway for recreation purposes, the outcome of this process directly affects my family and friends. The outcome should be balanced between a clean river for the community and a cost-effective remedial plan for Alcoa to ensure protection of the environment and human health.

Both the Grasse River and Alcoa are important to my community. Alcoa employs more than 1,000 local men and women and supports many community organizations. I encourage this process to move forward with final resolution, so the community can begin to experience the benefits of the remediation.

Tammy L. Lakins.
ABS Manager
GPP-US: Massena Operations
Office: (315)764-4748
Mobile: (315)842-6287

plan...
page 1 of 1
10/26/2012 04:38 PM



Remedial action in the Grasse River

Susan Wolf

to:

Young Chang

10/26/2012 10:23 AM

Hide Details

From: Susan Wolf <

U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Young S. Chang, Remedial Project Manager

U.S. Environmental Protection Agency

290 Broadway, 20th Floor

New York, NY 10007-1866

Email: Chang.Young@epa.gov

Fax: (212)637-3966

Dear Young Chang,

I am writing to express my concerns about the remedial alternative selection regarding the USEPA Grasse Rover PRAP decision. This plan has serious flaws which do not provide for environmental and human health protection, and these measures will not provide a permanent solution.

10/26/2012

I think it will be more effective to do more main channel dredging. This will have less impact on the environment and on human health and will decrease the amount of PCBs left in the river. Using a regular cap in the main channel will not hold up over time because the Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

Please consider more main channel dredging as a more protective and permanent alternative to address the issues in the Grasse River.

Sincerely,

Susan H. Wolf

U.S. FOIA Exemption 6 Redaction

A large black rectangular redaction box covering the signature area.

--

What we choose to emphasize in this complex history will determine our lives... The future is an infinite succession of presents, and to live now as we think human beings should live, in defiance of all that is bad around us, is itself a marvelous victory. Zinn



RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for Alternative Six and the quick remediation of the Grasse River.

A capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. While the recommendation contained in the PRAP goes beyond capping, I urge the EPA to move forward with Alternative Six.

The cleanup of the river has been studied for two decades with lots of involvement from agencies and people in the community, now it's time to move forward.

As a North Country resident I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest private employer in the North Country and a major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. Alternative Six achieves both.

Again, I strongly support Alternative Six and the quick remediation of the Grasse River.

Sincerely,

219 Center St.
Box 420
Massena, NY 13662-0420

315-764-0295
Fax 315-764-1589

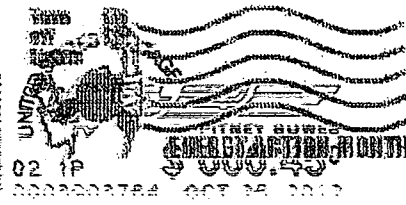
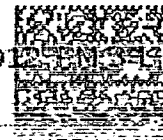
 **Send out an S.O.S. 1-800-553-1120**

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Office Supply, Inc.

219 Center St.
PO Box 420
Massena, NY 13662

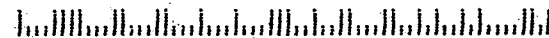
SYRACUSE NY 130

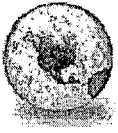
27 OCT 2012



Young S. Chang,
Remedial Project Engineer
U.S. EPA
290 Broadway, 20th Floor
New York, NY 10007-1866

10007186699





Grasse River Remediation Plan

Dave

to:

Young Chang

10/28/2012 04:51 PM

Hide Details

From: "Dave" U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

6

U.S. FOIA Exemption 6 Redaction

October, 28, 2012

Sir,

I have been following the Grasse River remediation plan since moving to the area 15 years ago. As an electrical engineer, I am familiar with the dangers that PCBs cause and the difficulty of cleanup.

The pilot projects and studies seem to point to the present solution being the most effective. Full river dredging could release more contaminants into the St. Lawrence creating an even bigger problem for all parties involved.

I urge the EPA to accept the plan presented by ALCOA and to implement this plan as soon as scheduling permits.

Thank you for your consideration,

David J. Nowak

11/19/2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River. The proposed remedy is not a protective remedy nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit. For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for traditional Mohawk uses the toxins must be removed.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

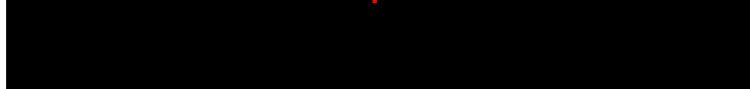
Sken:nen,

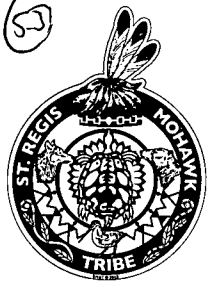


If you would like a response letter, please fill out the following information:

Name (print): Arnold L Prindup III

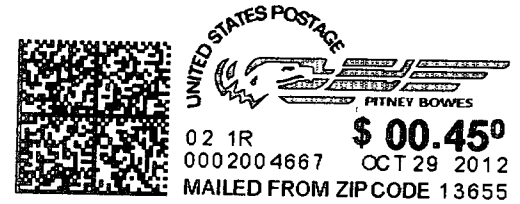
U.S. FOIA Exemption 6 Redaction





St. Regis Mohawk Tribe

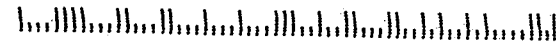
412 State Route 37
Akwesasne, New York 13655



02 1R
0002004667 OCT 29 2012
MAILED FROM ZIP CODE 13655
\$ 00.45⁰

US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
C/o Young S. Chan
Remedial Project Manager

10007*1866 C014



St. Lawrence County
BOARD OF LEGISLATORS
48 Court Street, Court House
Canton, New York 13617-1169
(315) 379-2276
FAX (315) 379-2463

KAREN M. ST. HILAIRE
County Administrator

SALLIE A. BROTHERS
Chair, Board of Legislators

October 29, 2012

To: Young S Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

From: Tony Arquiatt
St. Lawrence County Legislator
County Courthouse
48 Court Street
Canton, NY 13617-1169

Re: Proposed Remedial Action Plan for the Grasse River

Remedial Project Manager Chang:

I hope that the fall season finds you well. I write to you today to offer my full support for the Proposed Remedial Action Plan as it relates to the Grasse River in Massena, New York. I believe that the nearly two decade study proves that a capping remedy is protective of the environment and most importantly protective of human health. I am anxious to move this project forward to show that this sound scientific method works in protecting the health and welfare of the surrounding communities.

I am a Legislator in a county that is presently experiencing over 10% unemployment. As a result of this, I cannot stress enough to you the importance of keeping ALCOA Corporation and the hundreds of jobs that it creates here in St. Lawrence County.

Please contact me immediately if I can be of any future assistance in this process.

Respectfully,



Tony Arquiatt
St. Lawrence County Legislator
District 13



Grass River Remediation

Demers, Laurie

to:

Young Chang

11/01/2012 12:05 PM

Cc:

"Arquiett, Tony", Laurie.Marr

Hide Details

From: "Demers, Laurie" <LDemers@co.st-lawrence.ny.us>

To: Young Chang/R2/USEPA/US@EPA

Cc: "Arquiett, Tony" <arquiettw@yahoo.com>, <Laurie.Marr@alcoa.com>

1 Attachment



10.29.12 ltr to EPA re grasse river remediation.docx

Please see attached letter from Legislator Tony Arquiett to Remedial Project Manager Young S. Chang, US EPA.

Laurie K. Demers
Secretary to the Board of Legislators
48 Court Street, Court House
Canton, NY 13617
Telephone: (315) 379-2276

***** ATTACHMENT NOT DELIVERED *****

This Email message contained an attachment named
image001.jpg
which may be a computer program. This attached computer program could
contain a computer virus which could cause harm to EPA's computers,

network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced into the EPA network. EPA is deleting all computer program attachments sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you should contact the sender and request that they rename the file name extension and resend the Email with the renamed attachment. After receiving the revised Email, containing the renamed attachment, you can rename the file extension to its correct name.

For further information, please contact the EPA Call Center at (866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****

St. Lawrence County
BOARD OF LEGISLATORS
48 Court Street, Court House
Canton, New York 13617-1169
(315) 379-2276
FAX (315) 379-2463

KAREN M. ST. HILAIRE
County Administrator

SALLIE A. BROTHERS
Chair, Board of Legislators

October 29, 2012

To: Young S Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

From: Tony Arquiatt
St. Lawrence County Legislator
County Courthouse
48 Court Street
Canton, NY 13617-1169

Re: Proposed Remedial Action Plan for the Grasse River

Remedial Project Manager Chang:

FILED
10/30/12

I hope that the fall season finds you well. I write to you today to offer my full support for the Proposed Remedial Action Plan as it relates to the Grasse River in Massena, New York. I believe that the nearly two decade study proves that a capping remedy is protective of the environment and most importantly protective of human health. I am anxious to move this project forward to show that this sound scientific method works in protecting the health and welfare of the surrounding communities.

I am a Legislator in a county that is presently experiencing over 10% unemployment. As a result of this, I cannot stress enough to you the importance of keeping ALCOA Corporation and the hundreds of jobs that it creates here in St. Lawrence County.

Please contact me immediately if I can be of any future assistance in this process.

Respectfully,

Tony Arquiatt
St. Lawrence County Legislator
District 13

FILED
10/30/12
Canton, New York
SALLIE A. BROTHERS
Chair, Board of Legislators



Move Forward with the Grasse River Remediation Plan

Bill Jagers

to:

Young Chang

10/29/2012 08:56 AM

Hide Details

From: Bill Jagers <[REDACTED]>

To: Young Chang/R2/USEPA/US@EPA

Mr. Chang,

I am writing to you as a long time community member of Massena, NY. I am strongly in favor of the EPA's current plan to remediate the Grasse River. I sincerely want the Remediation Plan to move forward.

Thank you,

William Jagers

[REDACTED]



alcoa clean up

Jonnie Dorothy

to:

Young Chang

10/29/2012 01:49 PM

Hide Details

From: "Jonnie Dorothy" <jdorothy@massenahospital.org>

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



20121029122642772.pdf

Dear Remedial Project Manager

Please accept the attached letter of support for Alcoa and the Grasse River cleanup.

Sincerely,

*Jonnie J. Dorothy
Sr. Director of Human Resources
Massena Memorial Hospital
One Hospital Drive
Massena, NY 13662
(P) 315-769-4339
(F) 315-769-4344
jdorothy@massenahospital.org*

Date:

10/29/12

Your Name and Address:

Jeanne Dorothy

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for Alternative Six and the quick remediation of the Grasse River.

A capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. While the recommendation contained in the PRAP goes beyond capping, I urge the EPA to move forward with Alternative Six.

The cleanup of the river has been studied for two decades with lots of involvement from agencies and people in the community, now it's time to move forward.

As a North Country resident I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest private employer in the North Country and a major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. Alternative Six achieves both.

Again, I strongly support Alternative Six and the quick remediation of the Grasse River.

Sincerely:

Jeanne Dorothy



Grass River Remediation Support Letter

Reynolds, Sharon J. to: Young Chang

10/29/2012 03:48 PM

Cc: "Reynolds, Sharon J.", Reynolds Home

From: "Reynolds, Sharon J." <Sharon.Reynolds@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA
Cc: "Reynolds, Sharon J." <Sharon.Reynolds@alcoa.com>, Reynolds Home
U.S. FOIA Exemption 6 Redaction

To: Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EBA is also a reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

As an Alcoa employee, I can testify to the importance of the Grasse River and Alcoa's presence in the community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,100 hardworking men and women. The Grasse River remediation is important to everyone at Alcoa.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Also I am a resident of Massena and own a residence on the Grasse River in Massena. This is a beautiful river that is enjoyed by many home owners and by all residents of Massena as it runs through the center of downtown Massena all the way to the St Lawrence River. We all want to see the river issues resolved and remediated so our community can continue to enjoy the Grasse River for years to come. The outcome of this process directly affects me and my family.

Again, I pledge my strong support for the Grasse River cleanup plan that is being considered at this time.

Sincerely,

Sharon Reynolds

U.S. FOIA Exemption 6 Redaction

Sharon Reynolds
Sr Systems Analyst
Alcoa - Massena West Operations
sharon.reynolds@alcoa.com
Office: 315-764-4765 Act Net 240-4765
Cell: 315-842-6374
Fax: 315-764-4460



Grasse River
FRED CONN

to:

Young Chang

10/29/2012 05:00 PM

Sent by:

U.S. FOIA Exemption 6 Redaction

Hide Details

From: FRED CONN <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

Sent by: U.S. FOIA Exemption 6 Redaction

Would like to see the Grasse River remediation move forward.



Grasse River

Bonnie Conn

to:

Young Chang

10/29/2012 05:03 PM

Hide Details

From: Bonnie Conn **U.S. FOIA Exemption 6 Redaction**

To: Young Chang/R2/USEPA/US@EPA

Would like to see the Grasse River remediation move forward as soon as possible.



Grasse River Cleanup Plan

Tim Ahlfeld

to:

Young Chang

10/29/2012 06:53 PM

Cc:

"Tim Ahlfeld"

Hide Details

From: "Tim Ahlfeld" U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Cc: "Tim Ahlfeld" U.S. FOIA Exemption 6 Redaction

Ms Young

As a member of the Village Board in Massena, NY, I implore you and your agency to moved forward with the proposed Grasse River Cleanup Plan. ALCOA fully supports the plan and the gross majority of the local communities support the plan as well.

One only needs to watch the evening news to see the impacts that "runaway" legislation can have on industry. ALCOA is the lifeblood of this community, and is seeking to infuse vast sums of money into another large capital project. Care must be taken to avoid allowing the voices of a few to dictate the future of our area.

If my memory serves me right, I believe that ALCOA had worked with the Massena Electric Department (MED) to come up with an alternate plan a few years ago. Massena Electric spent millions of dollars only to have the rug pulled out from underneath them at the end. I am quite surprise that several people in different alphabet agencies, including yours, weren't fired over their part in the charade.

Let's quit the gamesmanship and have the courage to stand up and move forward. The group opposing the plan is largely divided. Trying to even reach a middle ground within their constituents is nearly impossible.

Do the right thing.

PS – I will be forwarding this email to all of our local, state and federal representatives.

11/19/2012

Tim Ahlfeld

Trustee – Village of Massena

U.S. FOIA Exemption 6 Redaction



[Faint, illegible text]

[Faint, illegible text]

[Faint, illegible text]



Grasse River
Melissa Scudder

to:

Young Chang

10/30/2012 08:56 AM

Hide Details

From: Melissa Scudder <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

I am writing this email as someone who lives near the Grasse river and I wanted you to know that I am supporting the EPA's Proposed Remedial Action Plan to address the PCB contamination in the Grasse River. I also support making a resolution on this as soon as possible.

I am asking that you please encourage the process to move forward NOW after nearly two decades of expert study and input from many people, so that the community can begin experiencing the benefits of the remediation.

Remember the importance of the Grasse River and Alcoa to the North Country Economy. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,000 hardworking men and women and supports many community organizations.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. This plan does all that, and I hope you will help ensure that the EPA to move forward with this PRAP, and issue a Record of Decision as soon as possible that would legally bound Alcoa to fund and execute the cleanup.

Thank you

--

Melissa

Melissa Scudder

U.S. FOIA Exemption 6 Redaction



ALCOA - GRASSE RIVER REMEDIATION

Darren Wilson

to:

Young Chang

10/30/2012 09:19 AM

Cc:

"James Ward"

Hide Details

From: "Darren Wilson" <djwilson@stlawrencegas.com>

To: Young Chang/R2/USEPA/US@EPA

Cc: "James Ward" <jpward@stlawrencegas.com>

Mr. Chang,

I am writing to support the EPA's Proposed Remedial Action Plan to address the PCB contamination in the Grasse River in Massena, NY. Alcoa is the largest employer in Massena, providing more than 1000 jobs. It is also Enbridge St. Lawrence Gas' largest and most critical customer. I believe Alcoa deserves a cost-effective plan that protects the local environment and the health of those living in the area. If Alcoa is forced into a plan other than a capping remedy or the EPA plan, the potential impact to Alcoa and the local economy as a whole could be devastating.

Thank you for your consideration.

Darren J. Wilson
Manager Distribution Operations
Enbridge St. Lawrence Gas
33 Stearns Street, P.O. Box 270
Massena, NY 13662

(P) 315.842.3609

(C) 315.250.0632

(F) 315.764.9226



Grasse River PRAP

Ryan Hayes

to:

Young Chang

10/30/2012 09:25 AM

Hide Details

From: Ryan Hayes <[redacted] U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

I am in support of the Grasse River PRAP that has been issued by the EPA. I feel that the EPA should issue the Record of Decision as soon as possible so the cleanup process can get started.

Thank you
Ryan Hayes

11/19/2012



The Grasse River Cleanup
Kramer, Susan D. to: Young Chang

10/30/2012 09:50 AM

From: "Kramer, Susan D." <Susan.Kramer@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Dear Young Chang,

I am writing to express my support for the proposed Grasse River cleanup plan.

I have lived on the Grasse River, at a location with planned near-shore dredging, for the last 11 years. During these 11 years, I have enjoyed both swimming and boating in and on the river and expect to do so for years to come. I also have family members that fish on the river regularly. I have been a resident of Massena for 21 years and have worked at Alcoa for 30 years.

I am satisfied with the EPA choice for a solution but will mention that I would be satisfied with capping only. I believe that the dredging portion of the plan will cause unnecessary disruption to the river and the river property owners.

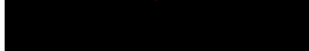
I also strongly believe that this plan is best for the future of my community and Alcoa in Massena.

Please proceed with this plan.

Sincerely,

Susan Kramer

U.S. FOIA Exemption 6 Redaction





Grasse River remediation
Ward, Tad D. to: Young Chang

10/30/2012 09:57 AM

From: "Ward, Tad D." <Tad.Ward@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

EPA,

I just want to express my voice that I support the EPA proposed remediation of the Grasse River.

Tad Ward

10/30/2012

Remediation of the Grasse River



John Horan to: Young Chang

10/30/2012 10:44 AM

From: "John Horan" **U.S. FOIA Exemption 6 Redaction**
To: Young Chang/R2/USEPA/US@EPA

To Whom it may concern,
Please be advised that I support the remedial plan as put forth by the
EPA for the clean up of the grasse river in Massena. I believe it is a
responsible approach.

John J Horan

U.S. FOIA Exemption 6 Redaction



Alcoa remediation

Dan Hubert

to:

Young Chang

10/30/2012 11:02 AM

Hide Details

From: Dan Hubert [U.S. FOIA Exemption 6 Redaction]

To: Young Chang/R2/USEPA/US@EPA

Please respond to Dan Hubert [U.S. FOIA Exemption 6 Redaction]

Just a short email to show my support for the Proposed Remedial Action Plan to address the PCB contamination in the Grasse River issued by the US Environmental Protection Agency. Alcoa's proposal is a reasonable plan and would also ensure the modernization of the plant in an area which is in dire need of jobs. thanks for your attention...dan hubert



Grasse River
Arthur Cross

to:

Young Chang

10/30/2012 12:02 PM

Hide Details

From: "Arthur Cross" <across@atlantictesting.com>

To: Young Chang/R2/USEPA/US@EPA

Chang,

I am writing to express my support in the PCB cleanup of the Grasse River. The Grasse River needs to get cleaned up based on science. Alcoa is also a valuable resource to our local communities and needs to remain in Massena. Please see to it that decisions are made timely and in everyone's best interest.

Thank You for your time,
Art Cross

Arthur Cross
Operations Manager

ATL

130 Arizona Avenue
Suite 1540
Plattsburgh, NY 12903
Phone: 518-563-5878
Fax: 518-562-1321
www.atlantictesting.com

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11/19/2012



Alcoa Remediation of the Grasse River

Greco, Frank

to:

Young Chang

10/30/2012 01:40 PM

Hide Details

From: "Greco, Frank" <Frank.Greco@nypa.gov>

To: Young Chang/R2/USEPA/US@EPA

Dear Mr. Young~

I support the EPA's Proposed Remedial Action Plan to address the PCB contamination in the Grasse River. I do not believe forcing Alcoa to dredge the entire 7 miles of the river to make sense, environmentally speaking. As a resident of the lower part of the Grasse River i fully support the EPA's Proposal.
Thank you for your time.

Sincerely,

Frank Greco

getgreco@hotmail.com

frank.greco@nypa.gov

262 fregoe road

Massena, New York 13662

cell (315)842-6910

11/19/2012



Alcoa Grass River Clean-up Proposal

Bruce Beckstead

to:

Young Chang

10/30/2012 03:34 PM

Hide Details

From: Bruce Beckstead **U.S. FOIA Exemption 6 Redaction**

To: Young Chang/R2/USEPA/US@EPA

Please respond to Bruce Beckstead **U.S. FOIA Exemption 6 Redaction**

Dear Young Chang,

I strongly urge the EPA to agree to and go forward with Alcoa's proposed \$243 million plan in the Massena, NY area. As one of the area people that use the river recreationally to swim and waterski in, I believe this proposal adequately and reasonably covers the risks. Please do not consider the voice of irrational people who overreact and will likely not rest with any option.

Thank you,

Bruce Beckstead

U.S. FOIA Exemption 6 Redaction



Grasse River Remediation Project

Donald Curry

to:

Young Chang

10/30/2012 03:48 PM

Hide Details

From: Donald Curry <[redacted]>

To: Young Chang/R2/USEPA/US@EPA

Dear Mr. Chang,

I am writing this email to let you know as a resident of Massena for the past 26 years that I am in favor of the Grasse River Remediation moving forward without any delay. I have reviewed "thegrasseriver.com" website, read through the options, and am fully support the \$243 million Remediation project moving forward.

Thank you for considering my request.

Sincerely,

[redacted]



remediation would

cecilia kim

to:

Young Chang

10/30/2012 03:59 PM

Hide Details

From: cecilia kim

U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

We would gladly welcome the Remediation project that would cost \$ 243 million to Alcoa.

Please move forward with the Grasse River remediation project as proposed.

Luke and cecilia Kim

U.S. FOIA Exemption 6 Redaction

🙏 in His agape Luke and cecilia 😊



Massena Grasse River Remediation Project
Mary Perry to: Young Chang

10/30/2012 05:05 PM

From: "Mary Perry" <[redacted]>
To: Young Chang/R2/USEPA/US@EPA

I would like to see this remediation project move forward so we can have the Grasse River cleaned up and so Alcoa can move forward in their modernization plans.

Thank you for allowing me to give my opinion.

Mary E Perry
[redacted]

10/30/2012 05:05 PM



Grasse river remediation action
Tim & Lisa Long to: Young Chang

10/30/2012 05:08 PM

From: Tim & Lisa Long **U.S. FOIA Exemption 6 Redaction**
To: Young Chang/R2/USEPA/US@EPA

Young S. Chang,

My name is Timothy P Long . I am an Alcoa employee but even more I am a life long residence of Massena NY. My children, wife and I have had lived and been active in this community for 51 years. We believe that you have taken all of the scientific information and have made a well educated decision in the proposed PRAP recently announced. We believe this is the best alternative for both Massena residents and employees of Alcoa. We are all well informed of the economic climate we now face as a company, community and nation and believe this determination will allow Alcoa to continue to view the upcoming modernization in a favorable light. I have been watching the removal of PCB in the Hudson and believe dredging of the water basin in this case would be a mistake. The fact that the levels have been consistently dropping over the last ten years in the fish population should be an indicator that suspension of this material is NOT in the best interest of the environment or human health. No one decision will satisfy all parties fully, but we believe this one will come as close as possible when you look at the total picture and all stake holders. Thank you for your consideration.

Sincerely,

Timothy P Long and Family



Grass River cleanup
Jerry Aiken to: Young Chang

10/30/2012 06:41 PM

From: Jerry Aiken U.S. FOIA Exemption 6 Redaction
To: Young Chang/R2/USEPA/US@EPA

I support the current proposal to clean the Grass River. The river and the wildlife that inhabit it deserve to thrive after years of abuse by industry, but I believe that we cannot destroy the economy of Northern New York by disapproving of the recommendation that has been made to clean up the river. In the best of worlds, this would not have happened, but it did and we should take the best path to solve the problem of the river and the economy.

Sent from my iPad



Young S. Chang, Remedial Project Engineer of the U.S. Environmental Protection Agency

Tom Saxby

to:

Young Chang

10/30/2012 07:22 PM

Hide Details

From: "Tom Saxby" J.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

I am in favor of the remediation project for the clean up in the Massena area. I support Alcoas efforts.. Thomas A. Saxby



Brittany Groebler

to:

Young Chang

10/30/2012 08:29 PM

Hide Details

From: Brittany Groebler U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Hello,

I am e-mailing to express my deep desire to see the Grasse River remediation move forward in Massena, NEW YORK.

Thank you,
B. Groebler

11/19/2012



Alcoa clean up of Grass River
Bruce and Rosalie Smith to: Young Chang

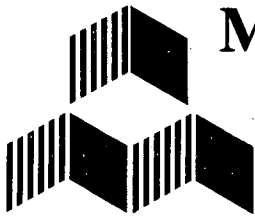
10/30/2012 09:12 PM

From: Bruce and Rosalie Smith **U.S. FOIA Exemption 6 Redaction**
To: Young Chang/R2/USEPA/US@EPA

Sirs

The proposed cleanup of the Grass river, with some removal of contaminated earth, and capping the remainder seems to me to be an excellent plan. The only alternative I can see is to dredge everything which I believe will result in further contamination down stream. This proposal has my full support

Bruce Smith
U.S. FOIA Exemption 6 Redaction



MASSENA SAVINGS & LOAN



Main Office
255 MAIN STREET
MASSENA, NY 13662

Branch Office:
155 LINCOLN AVENUE
WADDINGTON, NY 13694

October 30, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway 20th Floor
New York NY 10007-1866

Re: Grasse River Remediation
Massena New York

Mr. Chang;

As a lifelong resident of Massena NY I am writing this letter in support of the current proposed plan to cap the river and not to go forward with an extensive dredge project. Throughout the course of my life, 47 years I have spent considerable amounts of time swimming and fishing in this river as recently as last week. I am no scientist however I can say without any reservation that this river, as is probably does not pose any threat to human health. That said I fully understand that when tested foreign byproducts of industry for over 100 years are bound to be evident. (Probably not all from ALCOA but by others upstream also) The best method for cleanup is probably the one that has been in practice for the last 10 to 15 years natural cleanup by God. However I understand other factions of society that have nothing better to do than see others spend ungodly sums of money to attempt to fix something that will rectify itself seems to be par for the course. After reading the proposed project scope of capping it seems to me to be the best solution for the long term viability of the river. I firmly believe with the seasonal swift currents of the river combined with ice flows, a dredge project would create a far worse problem to the river for many years into the future. Capping the current sediment with a sturdy top coat method is the best alternative to doing nothing which should satisfy all parties. The most important part of the project is to strike a viable solution to the problem at hand while attempting to maintain fiscal responsibility insuring longevity for ALCOA to support the community by providing numerous good paying jobs and stable employment for the region.

Best Regards

Kirk Wilmschurst

President

Massena Savings & Loan

www.massenasavingsloan.com

Phone (315) 764-0541 • Fax (315) 769-6542



Grasse River remediation
Kirk Wilmshurst to: Young Chang

10/31/2012 10:31 AM

From: "Kirk Wilmshurst" <kwilmshurst@massenasavingsloan.com>
To: Young Chang/R2/USEPA/US@EPA

1 attachment



20121031092934.pdf

Attached please find Support letter for Grasse river project Massena NY.
Original to follow in mail
Thank You

Kirk Wilmshurst
315-764-0541 wrk
kwilmshurst@massenasavingsloan.com

10/31/2012



MASSENA SAVINGS & LOAN



Main Office
255 MAIN STREET
MASSENA, NY 13662

Branch Office:
155 LINCOLN AVENUE
WADDINGTON, NY 13694

October 30, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway 20th Floor
New York NY 10007-1866

Re: Grasse River Remediation
Massena New York

Mr. Chang;

As a lifelong resident of Massena NY I am writing this letter in support of the current proposed plan to cap the river and not to go forward with an extensive dredge project. Throughout the course of my life, 47 years I have spent considerable amounts of time swimming and fishing in this river as recently as last week. I am no scientist however I can say without any reservation that this river, as is probably does not pose any threat to human health. That said I fully understand that when tested foreign byproducts of industry for over 100 years are bound to be evident. (Probably not all from ALCOA but by others upstream also) The best method for cleanup is probably the one that has been in practice for the last 10 to 15 years natural cleanup by God. However I understand other factions of society that have nothing better to do than see others spend ungodly sums of money to attempt to fix something that will rectify itself seems to be par for the course. After reading the proposed project scope of capping it seems to me to be the best solution for the long term viability of the river. I firmly believe with the seasonal swift currents of the river combined with ice flows, a dredge project would create a far worse problem to the river for many years into the future. Capping the current sediment with a sturdy top coat method is the best alternative to doing nothing which should satisfy all parties. The most important part of the project is to strike a viable solution to the problem at hand while attempting to maintain fiscal responsibility insuring longevity for ALCOA to support the community by providing numerous good paying jobs and stable employment for the region.

Best Regards

Kirk Wilmshurst

President

Massena Savings & Loan

www.massenasavingsloan.com

Phone (315) 764-0541 • Fax (315) 769-6542

October 30, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

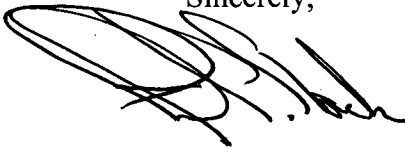
Dear Ms. Chang:

My name is Martha Slack and I am a retired school teacher. As a teacher in Massena I have come to know truly thousands of students, most from Massena but many from Akwesasne. Through my tenure as a teacher I have come to know so many of these students from our region and have come to recognize the many strengths and commonalities we have as well as our differences.

You are presently deciding one of the major issues that looms over our community, young and old. I understand the science, emotion and economics of many who are involved on the various sides of this issue. I empathize with all of them.

It is my sincere hope and expectation that EPA has developed this proposed plan with sufficient technical input and has set emotion aside. For the good of our community, for the good of our largest employer, and the good of the Grasse River I offer my support to the plan that the EPA has endorsed.

Sincerely,

A handwritten signature in black ink, appearing to read 'Martha Slack', written in a cursive style.

Martha Slack

U.S. FOIA Exemption 6 Redaction

SYRACUSE NY 130

13 NOV 2012 PM 4 L



Young S. Chang
Remedial Project Manager
US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1823

10007-1823



MASSENA ELECTRIC DEPARTMENT
71 E. Hatfield Street • PO Box 209 • Massena, New York 13662
Office: (315) 764-0253 • Fax: (315) 764-1498
www.massenaelectric.com

October 30, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young Chang,

My name is Richard Blais, and I am Vice Chairman of the Massena Electric Utility Board.

I am aware of EPA's requirement to make a scientifically wise decision for the long term health of the lower Grasse River. I have reviewed the basic material on the website, including the scope of work that EPA has put forward in the PRAP. I have also familiarized myself with the other options which were considered as part of this prolonged process. Given the studies that have been done and the extensive review that has been undertaken I have little doubt that the proposal is adequate.

While I, and my colleagues, on the MEUB would have enjoyed to have been a part of the solution of the Grasse River PCB issue, I feel the plan proposed is a justifiable decision and a logical path forward.

Best Regards,

Richard Blais
Vice Chairman
Massena Electric Utility Board



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

31st October 2012

Dear Young Chang,

I, CELIA NYAMWERU (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Celia Nyamweru

(Name) CELIA NYAMWERU

(Addr) **U.S. FOIA Exemption 6 Redaction**

(City)

Professor of Anthropology (Emerita)
St Lawrence University
CANTON NY 13617

ST. LAWRENCE UNIVERSITY

ANTHROPOLOGY

23 Romoda Drive

Canton, New York 13617

SYRACUSE NY 130

03 NOV 2012 PM 3 L



Young S. Chang, Remedial Project Manager

U.S. E.P.A.,

290 Broadway, 20th Floor,

New York

NY 10007-1866

10007182399





Grasse River - Support

Ike Bogosian

to:

Young Chang

10/31/2012 07:37 AM

Hide Details

From: "Ike Bogosian" <

U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Young S. Chang
Remedial Project Manager

I'm sending you & your agency this e-mail in support of the EPA's Proposed Remedial Action Plan to address the PCB contamination in the Grasse River.

Thank You,

Ike Bogosian

U.S. FOIA Exemption 6 Redaction



EPA'S Plan
Steve Mailhot

to:

Young Chang

10/31/2012 06:20 AM

Hide Details

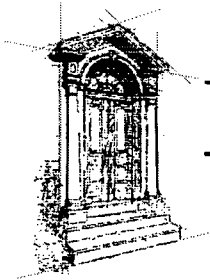
From: "Steve Mailhot" U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

I support the Proposed Remedial Action Plan set by the the EPA. I feel it's a good plan of attack and lets get this thing underway ASAP.

Steve Mailhot

U.S. FOIA Exemption 6 Redaction



Heritage Homes Inc.

October 31, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

My name is Richard Maginn. I am a Massena Businessman and a member of the Massena Electric Department Board.

In this latter role, I was able to work extensively with Alcoa to understand the environmental problems and potential solutions on the Grasse River as we evaluated a hydroelectric generating option. While I am profoundly disappointed that a solution that involved MED's proposed hydro plant could not be reached, I am completely satisfied that Alcoa is willing to act in the most scientifically prudent manner possible. To that end, with decades of scientific data now completed, I believe now is the time to conclude studies and enact the proposed Action Plan.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Maginn". The signature is fluid and cursive, with a long, sweeping tail that extends downwards and to the right.

Richard Maginn
President

October 31, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Project Manager Chang,

My name is Albert Nicola and I am a retired teacher from Massena and a Town Councilman in Massena.

I am a lifelong resident of Massena, so I have known Alcoa, for better or worse in my community for my entire life.

I have been a Councilman since 1986 and it seems in that time we have always been monitoring PCB problems. Between Alcoa and GM we have demonstrated and studied and collected data related to PCB's in this community for decades.

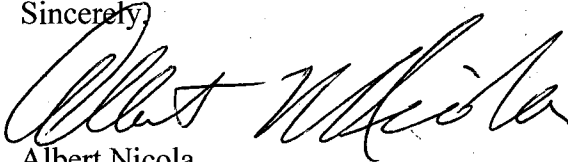
It has cast a pall over the community.

No doubt, the clean up at GM and Alcoa needed to happen. Now, they need to end and this community to begin again!

If you have not figured out the solution in twenty years we should all be ashamed. But you have figured out the best remedy. Admittedly it is not a solution. The solution was for the damage never to have been done. The remedy is to make the best of the situation. It is time to come out of this dark period with a cleaner environment and with a community that does not have the constant distraction of cleaning this river.

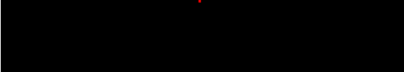
I support the proposal EPA has endorsed to clean the river.

Sincerely,



Albert Nicola

U.S. FOIA Exemption 6 Redaction





clean up
bhazelton2

to:

Young Chang

10/31/2012 12:10 PM

Hide Details

From: <U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

My name is Bernard M Hazelton and I wish to voice my support for the proposed clean-up plan that the EPA has suggested for Alcoa to follow.



Grass River cleanup

Beaulieu, William C. to: Young Chang

10/31/2012 02:32 PM

From: "Beaulieu, William C." <William.Beaulieu@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Hi Young,

I wish to add my support for recommendation contained in the PRAP for the Grass river cleanup and a speedy record of decision so Alcoa will move to modernize. I have worked for Alcoa for 23 years and my father worked for them for more than 41 years and his father my grandfather also worked for Alcoa, I now have my youngest son working for Alcoa. So you can see how Alcoa plays an important part in generations of families in the area. Massena and surrounding areas will become ghost towns if this is not settled in the very near future as this area cannot afford to lose Alcoa.

Thanks for listening,
Willie

Willie Beaulieu
ALCOA
Maintenance Planning and Scheduling
Process Flow Leader
eAM Funct-Admin
Massena East Plant
Phone, 315-764-6304
E-Mail william.beaulieu@alcoa.com

10/31/12

PRAP for the Grass River
... Alcoa for 23...
... grandfather also worked for...
... Alcoa plays an important...
... record of decision...



Grasse River
BJ Cardinal

to:

Young Chang

10/31/2012 06:19 PM

Hide Details

From: BJ Cardinal - U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Dear Mr. Chang ,

As a resident of Massena since 1989 and a retired firefighter / code official , ALCOA has meant a great deal

to the people of this community and survival of our economy .

ALCOA has complied with the EPA over many years as they became aware of the contamination they un-

knowingly caused. Therefor, I would like to offer my support of the proposed and EPA approved cleanup and

capping of the Grasse River. I believe this is the least disturbing to the river and a reasonable solution to this problem;

that hopefully will keep ALCOA in our community for many more years providing jobs for generation to come.

Respectfully,

Bernard J. Cardinal



Grasse River Remediation plan
Rozon, James R. to: Young Chang
Cc: "Rozon, James R.", "jrozon@twcny.rr.com"

10/31/2012 07:15 PM

From: "Rozon, James R." <James.Rozon@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA
Cc: "Rozon, James R." <James.Rozon@alcoa.com>, U.S. FOIA Exemption 6 Redaction
U.S. FOIA Exemption 6 Redaction

Please consider this as my expression of support for Alternative 6: t1-t72 Near shore dredge and backfill to Grade and t1-t72 mc Capping. As a resident of Massena, New York and a 38 year employee of Alcoa (Power System Electrician), I see this as the best overall solution to Remediating the Grasse River. I do not believe the added cost of dredging the total length of the contaminated section would provide any additional benefit. In my opinion it would only stir up more contaminant that would not or could not be contained and may spread downstream to other areas of the river. I believe the best possible outcome and solution may be achieved through partial dredging and capping. It is by this reasoning that I fully support EPAs Alternative 6 as the most viable Remediation Plan for the Grasse River.

Sincerely yours,
James R. Rozon

U.S. FOIA Exemption 6 Redaction

October 31, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Project Manager Chang,

Please accept these brief comments on the Grasse River Remediation Project. In short, I am willing to support the proposal though I think it goes too far.

According to the Alcoa website the following tests have been done over the last 15 years:

- Measurement of river velocities;
- Comparison of sediment bed elevation measurements collected at different times;
- Development of a hydrodynamic model to predict river velocities during high flow events;
- Study of suspended solids and PCB levels during high flow events;
- Measurement of erosion potential and grain size distribution of the sediments;
- Development of a sediment transport model to predict erosion during high flow events;
- Radiochemistry analysis of finely-sliced sediment cores; and
- Comparison of surface sediment, fish, and water column PCB levels before and after an extreme high flow event that occurred in January 1998.

I suspect this is only a partial list. There have also been numerous demonstration projects.

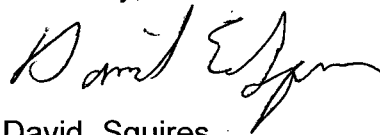
While I think the EPA has demanded too much of Alcoa in this cleanup, I think if Alcoa is willing to accept it, then it is time to move forward.

I am dubious of those who would suggest that more studies need to be done. In 15 years – it has all been done.

I am also very dubious of those who would suggest that dredging the river is the proper solution. To me, if there was one demonstration project that was conclusive it was the dredging effort in '05 which was a disaster. As you know, while it was well intentioned, it did far more harm than good.

If you are looking for the most beneficial solution for the environment, I think the option proposed is close. If you are going to be driven by politics, then all bets are off, and Massena and the environment will lose.

Sincerely,

A handwritten signature in black ink, appearing to read "David Squires". The signature is fluid and cursive, with a prominent loop at the end.

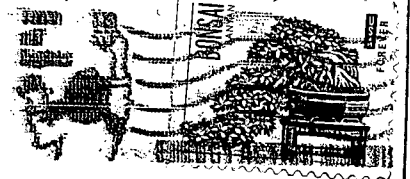
David Squires

DAVID SQUIRES

U.S. FOIA Exemption 6 Redaction

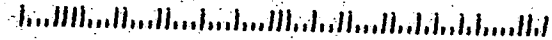
SYRACUSE NY 130

13 NOV 2012 PM 1 L



young S Chang
Remedial Project Director
US EPA
290 Broadway, 20th Floor
New York, NY 10007-1866

10007186699



November 1, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Project Manager Chang,

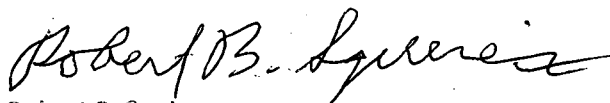
I have been quite involved with the Grasse River Remediation project for a number of years. Alcoa and EPA have been involved in some worthwhile studies and some that were clearly a waste of time.

This community has suffered enough while others have yanked us around. The river has been getting cleaner in spite of any actual work on the river. In fact, when you did try to "actively clean" the river by dredging it only made the situation worse.

It is time for Massena and Alcoa to move forward. The proposed plan is reasonable. The EPA had a mission to clean-up the river. Among the options which were considered this is among the best. While I think leaving the river alone at this point is the best option, I also think the greatest risk to the river is to stir everything up again. In retrospect, EPA should now agree that MED's hydro project would have been the most beneficial environmental solution as it would have precluded scour events. Unfortunately, other parties had a different agenda and in the process Massena and the environment got thrown under the bus.

As far as this plan, Alcoa and the community are clearly ready to support it. I think the EPA should be prepared to stop the near shore dredging if it goes as badly as previous dredging efforts have gone. However, there is no doubt that the EPA, Alcoa and the community need to put this behind us.

Sincerely,



Robert B. Squires

U.S. FOIA Exemption 6 Redaction



November 1, 2012

Ms. Young S. Chang
Rémedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang:

I want to express my support for the PCB Cleanup of the Grasse River.

I live on Plum Street which is just upstream of the cleanup zone. My sons and I are able to fish and enjoy other activities on the Grasse River just by walking out our back door. It is a convenience we greatly appreciate. Given my location, and use of the river, I have tried to stay up to date on what Alcoa and EPA are doing.

While I am not a scientist, I know that the river is getting cleaner year by year. I have also seen the documentation from the EPA/Alcoa study that said the dredging did not work at all.

Given all of these factors it is obvious that EPA has a fairly easy decision – keep things going in the right direction and don't re-contaminate the river.

Thank you,


Paul Brownell



Grasse River Plan for Massena, NY

Robert J. Davis - rjdavis

to:

Young Chang

11/01/2012 12:07 PM

Hide Details

From: "Robert J. Davis - rjdavis" <rjdavis@clarkson.edu>

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



image001.png

Dear Mr. Young,

I am writing to you today to express my opinion on the Grasse River clean-up plan for Massena, NY. As an outdoorsman who uses the Grasse River for recreation and a member of the Clarkson University community I urge you to make sound decisions based on scientific data when you make your final decision for the remediation of this unique river system. Please do what is right for the ecosystem, community and economy in this case and support the Alcoa plan as it currently stands.

Sincerely / Robert J. Davis

Robert J. Davis

Director –

Student Projects for Engineering Experience and Design

W.H. Coulter School of Engineering

Clarkson University

8 Clarkson Ave. Box 5700

Potsdam, NY 13699

Office: 315-268-3960

Cell: 315-212-2592

Mail: rjdavis@clarkson.edu

11/19/2012



JOSEPH A. GRIFFO
SENATOR, 47TH DISTRICT



THE SENATE
STATE OF NEW YORK

ALBANY OFFICE:
ROOM 302
LEGISLATIVE OFFICE BUILDING
ALBANY, NEW YORK 12247
(518) 455-3334
FAX: (518) 426-6921

UTICA OFFICE:
207 GENESEE STREET
UTICA, NEW YORK 13501
(315) 793-9072
FAX: (315) 793-0298

EMAIL ADDRESS:
griffo@senate.state.ny.us

November 1, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

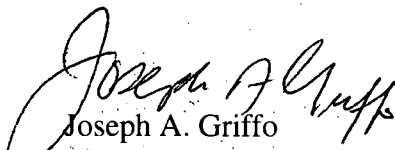
Dear Ms. Chang

I am writing to express my strong support for a Grasse River cleanup plan that is based on sound science and will help the people of New York's North Country have the action they deserve on this important issue.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also reasonable approach. As someone who cares deeply about the community I represent and this important waterway, I believe the outcome of the EPA's process is of utmost importance. After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort. It is not enough to agree that a problem must be resolved. I am urging you to work with the community and Alcoa to resolve this issue.

The community I represent deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. I believe that it is in the best interests of the region I represent to have a plan move forward as swiftly as possible, and urge you to take that action.

Sincerely,


Joseph A. Griffo
Senator



Comments on Grasse River Plan

griffo

to:

Young Chang

11/26/2012 10:45 AM

Hide Details

From: griffo@nysenate.gov

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



Griffo - Grasse River Proposal Comment.PDF

Ms. Chang,

Please find attached comments regarding the Grasse River cleanup proposal.

Would you please confirm that it was recieved and will be added to the record?

Thank you.

11/27/2012

JOSEPH A. GRIFFO
SENATOR, 47TH DISTRICT



THE SENATE
STATE OF NEW YORK

ALBANY OFFICE:
ROOM 302
LEGISLATIVE OFFICE BUILDING
ALBANY, NEW YORK 12247
(518) 455-3334
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UTICA OFFICE:
207 GENESEE STREET
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(315) 793-9072
FAX: (315) 793-0298

EMAIL ADDRESS:
griffo@senate.state.ny.us

November 1, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

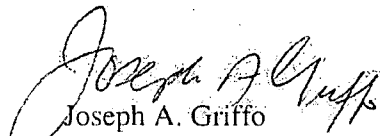
Dear Ms. Chang

I am writing to express my strong support for a Grasse River cleanup plan that is based on sound science and will help the people of New York's North Country have the action they deserve on this important issue.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also a reasonable approach. As someone who cares deeply about the community I represent and this important waterway, I believe the outcome of the EPA's process is of utmost importance. After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort. It is not enough to agree that a problem must be resolved. I am urging you to work with the community and Alcoa to resolve this issue.

The community I represent deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. I believe that it is in the best interests of the region I represent to have a plan move forward as swiftly as possible, and urge you to take that action.

Sincerely,


Joseph A. Griffo
Senator

November 1, 2012

Young Chang
Remedial Project Manager
US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Project Manager Chang,

We write today to express our support for the EPA's proposed cleanup remedy for the Grasse River. This community is very aware of what has gone on with the Grasse River for the last 20 years. As homeowners within the cleanup area and a family who uses the river during all seasons, we are especially sensitive to the river's future. To that end, we have kept ourselves up to date on testing and studies related to the river.

There are many homeowners in my neighborhood who are concerned that the near shore dredging proposed may do more harm than good. After 20 years of study, we are hopeful that EPA is staying true to your mandate to base your recommendation (and subsequent ROD) on sound science and not politics. Specifically, we trust that the near shore dredging is based on sound science and best interests of the river and not other factors. As a homeowner on the river and developer I would be much happier to skip the near shore dredging and redirect those funds for community development.

Thank you,



Vance and Kathy Fleury

U.S. FOIA Exemption 6 Redaction

Nov, 1, 2012

Dear Young Chang,

I want you to know that I support the proposed Grasse River Cleanup plan for Area. It is time to get moving on this - It means the betterment of this Northern area, and the Grasse River, which I happen to live on.

I can only hope this will take place, as proposed. I believe there are many individuals in this area that feel as I do. Let's hope they speak out.

Thanks for your attention in this matter.

Sincerely;
Patricia M. O'Connell

P.S. Address is

U.S. FOIA Exemption 6 Redaction

To whom it may concern:

I would like to see the Grasse River remediation project to move forward.

Alcoa is vital to our community and many people depend on that industry for jobs.

thank you.

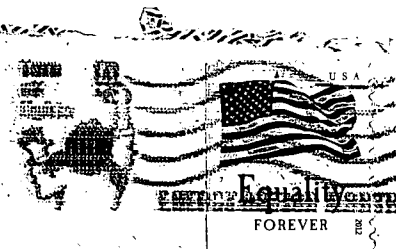
Peter Reiter

U.S. FOIA Exemption 6 Redaction

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SYRACUSE NY 130

01 NOV 2012 PM 3 L



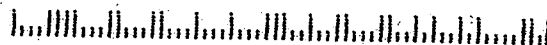
Mr. Young S. Chang, Remedial Project engineer

U.S. EPA

290 Broadway, 20th floor

New York, NY. 10007 - 1866

10007186699





Support Grasse River Project
fweber4 - to: Young Chang

11/01/2012 07:42 AM

From:

U.S. FOIA Exemption 6 Redaction

To:

Young Chang/R2/USEPA/US@EPA

Hello-

I wanted to send my support for the Grasse River clean up and Alcoa. I believe it's important to maintain a healthy environment and also an important economic engine to the Massena, NY area. I hope this is resolved so that all parties involved benefit!

Thank you!

Sincerely

Fred Weber
Aramco, Inc



Grasse River remediation request
Wells, Kenneth W.

to:

Young Chang

11/01/2012 04:31 PM

Cc:

"Kramer, Susan D."

Hide Details

From: "Wells, Kenneth W." <Kenneth.Wells@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

Cc: "Kramer, Susan D." <Susan.Kramer@alcoa.com>

Hello,

My wife and I reside in Massena, NY and have two children. I have worked for Alcoa here for almost fifteen years. The wife and I also own a florist shop in Massena and do a lot to support our community. We do a lot of boating and fishing on the waters in our area. With one daughter now in college and the second entering college in a couple of years, it will not be long before we are grandparents. After fifteen to twenty years of research and studies, we believe it is time for the EPA to make a move. So for our grandkids sake, please see your way clear to also help support our community and start the remediation of the Grasse River.

Thank you for your time and consideration concerning this matter.

Sincerely,

Kenny Wells

U.S. FOIA Exemption 6 Redaction

11/19/2012



Grasse River Cleanup - Move Forward!

Megan.O'Connell

to:

Young Chang

11/01/2012 04:42 PM

Hide Details

From: <Megan.O'Connell@Perkins.org>

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



Grasse River Cleanup Now!.docx

Mr. Chang,

I ask you to quickly move forward with the cleanup action of the Grasse River in Massena, New York. This decision directly impacts my family and my community.

Sincerely,
Megan O'Connell

Megan O'Connell
Teacher - Adapted Physical Education
Perkins School for the Blind
175 North Beacon Street
Watertown, MA 02472
Phone: 617.972.7267
Email: Megan.O'Connell@Perkins.org

All we see is possibility.....

11/19/2012

***** ATTACHMENT NOT DELIVERED *****

This Email message contained an attachment named
image001.jpg
which may be a computer program. This attached computer program could
contain a computer virus which could cause harm to EPA's computers,
network, and data. The attachment has been deleted.

This was done to limit the distribution of computer viruses introduced
into the EPA network. EPA is deleting all computer program attachments
sent from the Internet into the agency via Email.

If the message sender is known and the attachment was legitimate, you
should contact the sender and request that they rename the file name
extension and resend the Email with the renamed attachment. After
receiving the revised Email, containing the renamed attachment, you can
rename the file extension to its correct name.

For further information, please contact the EPA Call Center at
(866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****

Mr. Chang,

November 1, 2012

I am writing in support for the Grasse River cleanup plan in Massena, New York. I was born and raised in Massena and love my hometown. For over a decade, I visit my parents who live on the Grasse River. The outcome of this process directly impacts me and my family. I have lived all over the United States and Massena is one of the most beautiful places there is thanks to growing up on the Grasse River. This cleanup plan is based on sound science and needs to quickly move forward!

There has been fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also a reasonable approach. There has been nearly two decades of expert study and input from many people in order for the community to experience the benefits of remediation. The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

The Grasse River is an important part of Massena and I ask that you move forward with the cleanup for the good of the community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,000 hardworking men and women and supports many community organizations. Please Mr. Chang, move forward with the cleanup plan that includes protecting human health and our environment.

Sincerely,

Megan O'Connell

Megan O'Connell



I support the project as is, dredging would be the last thing that should be done

leo.murphy [redacted] to: Young Chang

11/01/2012 06:07 PM

From:

[redacted] U.S. FOIA Exemption 6 Redaction

To:

Young Chang/R2/USEPA/US@EPA

Sent from my iPhone

no last thing that should

11/01/2012



Grasse River Remediation
sbush47 to: Young Chang

11/02/2012 02:06 PM

From: **U.S. FOIA Exemption 6 Redaction**
To: Young Chang/R2/USEPA/US@EPA

Hi Mr. Chang:

My name is Sheryl Bush, I reside in Potsdam, NY.

I just want to say that I support the Grasse River Remediation on the St. Lawrence River.

Thank you.
Blessings
Sheryl

11/02/2012

St. Lawrence River



Grasse River Remediation

Doug von Borstel

to:

Young Chang

11/02/2012 08:20 PM

Hide Details

From: "Doug von Borstel" **U.S. FOIA Exemption 6 Redaction**

To: Young Chang/R2/USEPA/US@EPA

Dear EPA,

I'm writing this email in support of the proposed remediation plan for the Grasse River. I have lived in the North Country for 27 years and have been employed by Reynolds Metals Co. and Alcoa for 23 years. I feel the study of the river and the development of remediation options has been more the appropriate and it is now to time start the work. Even though I feel the chosen remediation option will be effective I think the other two options, 3 & 4, that cost less and decrease the PCBs in the fish and organisms deserve a second look.

Regards,

Douglas von Borstel

U.S. FOIA Exemption 6 Redaction

11/19/2012

November 2, 2012

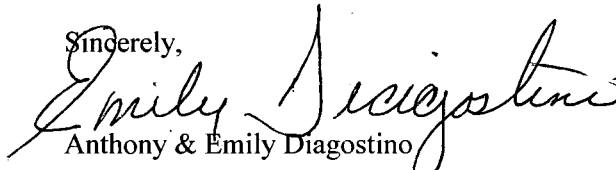
Young Chang , Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Attn: Ms. Young Chang:

My wife and I write today to convey our support for the EPA's proposed Grasse River cleanup. We have raised three children in Massena and we know the importance of Alcoa to our community. It has provided good jobs for so many people we know.

We also know the importance of a clean environment. This of course is your mission – to take the steps that best aid the environment, specifically, the Grasse River. No doubt, this region has had environmental problems through the years and needed EPA's involvement. Equally obvious is the fact that nature is taking a positive course on the Grasse River now that the outflow has been controlled. Based on the research and demonstration projects that have been done the scientific conclusion that you have reached is prudent and plainly obvious. We are hopeful that the EPA will remain strong in its directive and that Alcoa, Massena and the region can move forward with an environmentally sound and economically vibrant future.

Sincerely,


Anthony & Emily Diagostino



Mr. & Mrs. Tony Diagostino
U.S. FOIA Exemption 6 Redaction

SYRACUSE NY 130

09 NOV 2012 PM 3 L



Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th floor
New York, NY 10007-1866

10007-1866




November 2, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

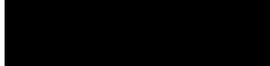
Remedial Project Manager Young S. Chang,

I write this letter to you today to express my support for the proposed Alcoa clean up of the Grasse River. This project is long overdue, but it is apparent that the proposal is in the best interest of the community and most importantly, the environment. For too long we have let local politics and the agenda of a few chosen activists decide what is best for the region and for the river. The purpose of your studies was to minimize emotion and let science rule the day. While I disagree with any dredging based on the results of the demonstration project I am willing to accept that EPA has offered a sound scientific plan that should be enacted. I therefore support the Proposed Remedial Action Plan.



Myles Russell

U.S. FOIA Exemption 6 Redaction



2 November, 2012

U.S. FOIA Exemption 6 Redaction

U. S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

ATTENTION: Young S. Chang, Project Manager
Grasse River Remediation Project

Honorable Members of the Grasse River Remediation Team:

My name is Larry Ralston. I am a retired educator of the Massena Central School District and a resident of Massena since 1965; I am also a volunteer appointee serving on the Board of Directors of the Business Development Corporation for a Greater Massena (BDC). This organization's mission is two-fold: (A) to retain the current jobs located in this community and (B) encourage the creation of additional jobs.

Therefore, I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

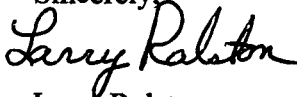
Fifteen years of scientific study shows that a capping remedy is protective of both human health and the environment. This process is not only effective over the long term but complements the natural recovery already occurring in the river. The alternative recommended by EPA is also a reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must now move forward so our community can begin experiencing the benefits of this remediation effort.

As an invested resident of Massena, I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in the area and a major supporter of this region's non-profit and civic organizations. Massena's non-profit organizations and Massena businesses rely on the jobs and goodwill provided by this important corporate citizen. A significant attribute of Alcoa's presence in Massena is the millions of tax dollars generated and paid by this Corporation to both the Massena Central School District and the Town of Massena.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely,



Larry Ralston

November 2, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang:

I am writing today to convey my support for the Grasse River Cleanup proposal from your agency.

I am an avid outdoorsman. I am a businessman. I am a parent of two children.

As my children grow up I want them to have a clean environment in Northern NY and I want them to have a good local economy where they and their neighbors can get good jobs. For over 100 years Alcoa has been the source of many good jobs directly, and by extension for many other jobs in the community. During those 100 years Alcoa has obviously made some mistakes.

What EPA should, and it appears has done, is make the best decision possible (given the range of options) for the River and community going forward. Nobody can undo what is done. We can only do what is best going forward. Since EPA's decision is the best option going forward, I want to support the PRAP the EPA has offered.

Sincerely,

A handwritten signature in black ink that reads "Joseph Putney". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

Joseph Putney
Putney Tree Service



MASSENA SAVINGS & LOAN



Main Office
255 MAIN STREET
MASSENA, NY 13662

Branch Office:
155 LINCOLN AVENUE
WADDINGTON, NY 13694

November 2, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

I am writing you today to express my support for the proposed cleanup of the lower Grasse River.

I enjoy the outdoors and use the lower Grasse River periodically. While I understand the social concerns for dredging, I know that the demonstration dredging project was counterproductive.

As someone who uses the river, I want Alcoa and EPA to take the most logical path forward for the river. I am concerned with the near shore dredging and the re-suspension issues that it may cause. I am relieved that this project is finally underway and I support the EPA's recommendation.

Sincerely,

Norman Decelles

U.S. FOIA Exemption 6 Redaction



www.massenasavingsloan.com

Phone (315) 764-0541 • Fax (315) 769-6542

November 5, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Kevin Kitzman, P.E.
Location Asset & Property Manager
Alcoa West & East Plants
PO Box 6391
Massena, NY 13662

Dear Ms. Chang:

I am writing to support EPA's remedial alternative for the Grasse River in Massena New York. I am a resident of Northern New York and an Alcoa employee. From my perspective I believe that moving ahead with this proposal is important for the future of Alcoa in Massena and people of Northern NY.

For Alcoa it will surely encourage further investment in Massena. For the people of Northern NY it will provide environmental protection, as well as jobs and tax revenue for local, state and federal agencies. Further delay or additional cost to the project holds great risks to the local economy and jobs. Alcoa could probably be forced to pay more for remediation of the Grasse River, but they can't be forced to operate here and provide jobs.

I very much appreciate EPA's use of sound science in support of this alternative. Please be watchful of commenters from outside the Northern NY region who would sacrifice the economic well being of thousands of people for very little environmental gain.

Sincerely:



Kevin Kitzman
Location Asset & Property Manager
Alcoa West & East Plants

Mr. and Mrs. Real C. Coupal

U.S. FOIA Exemption 6 Redaction

November 5, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

I want to express my opinion, that the proposed clean-up put forward by EPA, is the right plan.

I am a businessman in Massena and own property within the 7 mile stretch of the Grasse River that has been reviewed. Clearly, the course of nature is taking the Grasse River in the right direction, as its waters are clearing.

While removal of the problem, PCB's is ideal, the demonstration projects have shown that dredging creates as many problems as it solves. With that in mind, I want to offer my support to the proposed plan, which strikes a reasonable balance between nature's course, and the idyllic (but unachievable) goal of removal.



Real Coupal

U.S. FOIA Exemption 6 Redaction



Public Comments

Jeremy Sweeney

to:

Young Chang

11/06/2012 08:31 AM

Hide Details

From: "Jeremy Sweeney" <jsweeney@thewassociates.com>

To: Young Chang/R2/USEPA/US@EPA

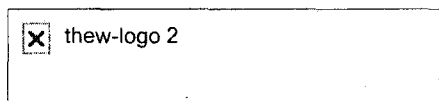
Comment:

I feel as though dredging is not always the answer for a cleanup. Sometimes I think it is good, when the soils are very contaminated, and other times, I feel it should just be left alone and not stirred up.

For this case I believe it is going to be a huge economical impact if we do not allow ALCOA to dredge at a fair cost to them. If we do not take care of ALCOA, then I foresee the modernization project not going through which will make the ALCOA Massena plants decisions on staying in the Massena area easy and they will close the plants and not worry about the economical impact of our local area.

I stand behind ALCOA on this project and believe the decision should be fair to them as our local economics depend greatly on ALCOA.

JEREMY L. SWEENEY, PLS



LAND / WATER / SUBSURFACE / ENERGY

**Senior Project Manager
Thew Associates PE-LS, PLLC
PO Box 463
6431 US Highway 11
Canton, New York 13617**

11/19/2012

Office: 315.386.2776
Facsimile: 315.386.1012
Cellular: 315.244.4009

jsweeney@thewassociates.com
www.TheAssociates.com

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which may be a computer program. This attached computer program could
contain a computer virus which could cause harm to EPA's computers,
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For further information, please contact the EPA Call Center at
(866) 411-4EPA (4372). The TDD number is (866) 489-4900.

***** ATTACHMENT NOT DELIVERED *****

Date:

November 6, 2012

Your Name and Address:

Julianne C. Pagvin
U.S. FOIA Exemption 6 Redaction
[Redacted Address]

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for Alternative Six and the quick remediation of the Grasse River.

A capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. While the recommendation contained in the PRAP goes beyond capping, I urge the EPA to move forward with Alternative Six.

The cleanup of the river has been studied for two decades with lots of involvement from agencies and people in the community, now it's time to move forward.

As a North Country resident I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest private employer in the North Country and a major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. Alternative Six achieves both.

Again, I strongly support Alternative Six and the quick remediation of the Grasse River.

Sincerely:

Julianne C. Pagvin

[Faint, illegible text and stamps at the bottom of the page, likely bleed-through from the reverse side.]



PERRAS ENVIRONMENTAL CONTROL, INC.

1909 STATE HIGHWAY 420
MASSENA, NEW YORK 13662
(315) 769-5900 FAX (315) 764-1049

November 6, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Remedial Project manager Chang:

I write to you today to offer my strong support for the proposed Grasse River Cleanup.

I was born in Massena, raised in Massena, I run a business in Massena and I am now raising a family in Massena. I know the importance of both Alcoa and the environment to our community. I know the damage that was caused by Alcoa and I have a deep respect for the importance of the jobs that Alcoa provides.

While it is a difficult balancing act of what is important on the social side of the equation, the technical side of the equation is far more straight forward. Simply put, the science says that Alternatives 3-6 are the most desirable for the environment. On the surface of the decision it seems you have already made a nod to the environmental community by choosing an option that is more expensive yet not as good for the environment (see Table #1 in EPA Proposed Plan). No matter, Alcoa and the community are prepared and ready to initiate this plan. I encourage EPA to do the same.

Sincerely,

Jeffrey W. Tyo
President

Date: Nov 6, 2012

Your Name and Address:

DARAEL PAQUIN

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for Alternative Six and the quick remediation of the Grasse River.

A capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. While the recommendation contained in the PRAP goes beyond capping, I urge the EPA to move forward with Alternative Six.

The cleanup of the river has been studied for two decades with lots of involvement from agencies and people in the community; now it's time to move forward.

As a North Country resident I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest private employer in the North Country and a major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. Alternative Six achieves both.

Again, I strongly support Alternative Six and the quick remediation of the Grasse River.

Sincerely:

Darrel Paquin



Alcoa,Massena cleanup info!

ricky white

to:

Young Chang

11/06/2012 07:35 AM

Hide Details

From: ricky white <[REDACTED]> U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

I worked at Alcoa as a mechanic for 39 years. In the late 70's I was told to pump pcp ladin waste oil into the storm sewer drains to cleanup for an Osha tour. I refused, told the forman that my family swims in the Grasse river. He had someone else do it.I went home,and called an conservation employee for guidance. He told to be careful because I would get fired.In the 80's I also saw a giant soluble oil waste oil glob floating by the Border Patrols docks. I thought it was a new sandbar.We drove our boat over to drop anchor for snorkeling.I kept plunging my oar into it thinking I would hit bottom. Thats when I realized the heavy rains had made the soluble oil lagoon overflowed into the river.

Susan Flynn

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

November 6, 2012

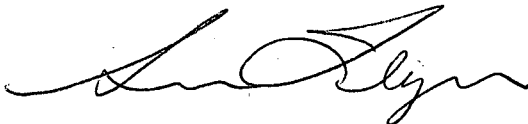
Dear Ms. Chang,

I am writing to you to express my support for the proposed Grasse River clean-up plan. I am a 25 year plus Alcoa employee and resident of Massena. I am proud to work for Alcoa and believe that this Company has been a responsible corporate citizen to Massena and all the other communities that Alcoa operates reside in. I believe the proposed plan is aligned with Alcoa's values to do what is right for the community we are part of.

First, the proposed plan is based on sound science that will clean the river to protect human health and the environment. It also allows the clean-up to be completed in a cost-effective manner. A cost-effective solution is vital to the long term viability of Alcoa's Massena Operations. I have seen this community diminish over the years and especially now, the importance of Alcoa to this community cannot be understated. Alcoa not only provides over a 1000 jobs, but the economic impact to Massena and the surrounding communities is multiplied by at least three. We must clean-up the river and we must balance the solution to assure the long-term positive impact to both.

I urge you to implement the proposed plan so that Alcoa and the community can move forward.

Thank-you for the opportunity to comment,



Susan Flynn

Young S. Chang
Remedial Project Manager
U.S. E P A
290 Broadway, 20th Floor
New York, NY 10007-1866

Attention Young Chang,

My name is Rene Hart, and I'm a retiree of General Motors. In my 30+ years with General Motors, I was exposed to extensive environmental clean-up activity with our facility in Massena. I know, from my professional and personal experience that the decision rendered by EPA last month, relating to the Grasse River clean-up, was not taken lightly. In fact, in reviewing the website, it is plainly evident that extensive studies have been undertaken.

The need for clean-up, remains a black cloud for our community, and for our largest employer. Having seen my former employer shutter its facilities in Massena, in part because of environmental concerns, gives me great pause. Alcoa, and the EPA have done sufficient due diligence on this project, and waiting any longer may not help the environment, but will certainly hurt the community.

Regards,



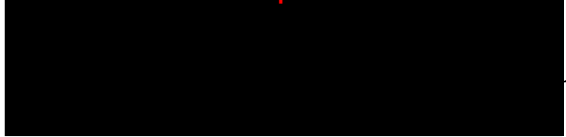
Rene P. Hart

U.S. FOIA Exemption 6 Redaction



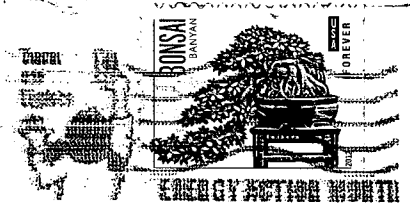
RENE P. HART

U.S. FOIA Exemption 6 Redaction



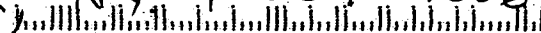
SYRACUSE NY 130

07 NOV 2012 PN 2 L



Yang S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, N.Y. 10007-1866

10007186699



Date: Nov 7, 12

Your Name and Address:

KAREN G. WYKINS

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for Alternative Six and the quick remediation of the Grasse River.

A capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. While the recommendation contained in the PRAP goes beyond capping, I urge the EPA to move forward with Alternative Six.

The cleanup of the river has been studied for two decades with lots of involvement from agencies and people in the community, now it's time to move forward.

As a North Country resident I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest private employer in the North Country and a major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment. Alternative Six achieves both.

Again, I strongly support Alternative Six and the quick remediation of the Grasse River.

Sincerely:

Karen Watkins



Grass river remediation

Heather Ramsdell

to:

Young Chang

11/07/2012 07:30 AM

Hide Details

From: Heather Ramsdell <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

Mr. Chang,

As a resident of northern New York, I would like to see the Grass River Remediation move forward.

Thank you,

Tony and Heather Ramsdell

U.S. FOIA Exemption 6 Redaction



Comment Letter - Grasse River
Kitzman, Kevin A. to: Young Chang

11/07/2012 07:56 AM

From: "Kitzman, Kevin A." <Kevin.Kitzman@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

1 attachment



MAS_A1_193@alcoa.com_20121105_155015.pdf

Ms. Chang - please see attached.

Thank you,

Kevin Kitzman

11/07/2012

11/07/2012

November 5, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Kevin Kitzman, P.E.
Location Asset & Property Manager
Alcoa West & East Plants
PO Box 6391
Massena, NY 13662

Dear Ms. Chang:

I am writing to support EPA's remedial alternative for the Grasse River in Massena New York. I am a resident of Northern New York and an Alcoa employee. From my perspective I believe that moving ahead with this proposal is important for the future of Alcoa in Massena and people of Northern NY.

For Alcoa it will surely encourage further investment in Massena. For the people of Northern NY it will provide environmental protection, as well as jobs and tax revenue for local, state and federal agencies. Further delay or additional cost to the project holds great risks to the local economy and jobs. Alcoa could probably be forced to pay more for remediation of the Grasse River, but they can't be forced to operate here and provide jobs.

I very much appreciate EPA's use of sound science in support of this alternative. Please be watchful of commenters from outside the Northern NY region who would sacrifice the economic well being of thousands of people for very little environmental gain.

Sincerely:



Kevin Kitzman
Location Asset & Property Manager
Alcoa West & East Plants

November 7, 2012

Dear Ms. Young Chang:

I am writing to express my full support for the proposed Grasse River cleanup.

My wife and I have been Massena residents since 1994 and have 3 children in the Massena School District. A job opportunity with Alcoa was the reason that we moved to Massena and we have been very fortunate to raise our family here over the last 18 years. As an Alcoa employee, I have had the opportunity to read about and study the wide range of clean up options that have been discussed over the last 15 years. I am confident that the proposed remedy is a viable option that will satisfy the community, Alcoa and ultimately provide closure to this long debated project.

Since the closure of General Motors, Alcoa has become even more important to the North Country economy. The proposed (science based) cost effective clean-up will help insure that Alcoa continues to provide good paying jobs to more than 1000 employees in Northern New York.

In summary, I am hopeful that the EPA will follow through with the proposed clean-up so the Grasse River will be remediated and Alcoa will commit to a long-term future here in Massena, New York.

Sincerely,

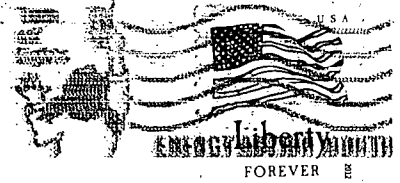


Mitch Nemier

Mitchell & Esther Nemier
U.S. FOIA Exemption 6 Redaction
[Redacted]

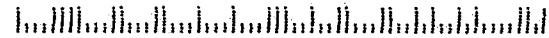
SYRACUSE NY 130

08 NOV 2012 PM 3 L



YOUNG S. CHANG, REMEDIAL PROJECT MGR
US ENVIRONMENTAL PROTECTION AGENCY
290 BROADWAY, 20TH FLOOR
NEW YORK, NY 10007-1866

10007186699



8 November 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

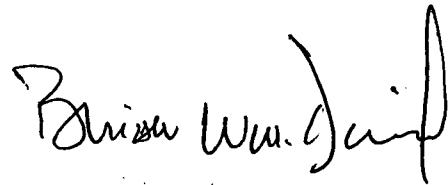
She:kon Young Chang,

I am writing to you concerning the Proposed Remedial Plan for the Grasse River in upstate New York. I am a resident of Kawehnoke (Cornwall Island) located opposite the mouth of the Grasse River. I am also a representative of Kawehnoke on the Mohawk Council of Akwesasne.

On October 28th, 2012, I attended a community information session on the Proposed Remedial Plan organized by the Akwesasne Task Force on the Environment. Surely you can appreciate my interest and concern seeing that the mouth of the Grasse River is only several hundred yards away from Kawehnoke, with many of our community's water intake systems being downstream from the mouth of the Grasse River.

From my perspective the harmful toxins contained in the shoreline and riverbed areas of the Grasse River, need to be completely removed. The placing of a rock/sand cap over the affected areas of the main channel merely suppresses this dangerous situation and passes it off to future generations. Removal is required in order to restore our confidence in the integrity of that portion of the river system.

This is my view on the matter.



Brian Wm. David
Chief
Kawehnoke

**MOHAWK COUNCIL
OF AKWESASNE**

Box 579, Cornwall
Ontario K6H 5T3

Mohawk Government

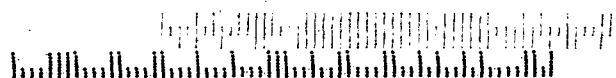


PB031 1982970
002058 N157V
1113 104826



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY, 10007-1866

1000731866 0014





Grasse River Clean Up Project

Timothy Kass

to:

Young Chang

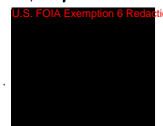
11/08/2012 08:37 PM

Hide Details

From: Timothy Kass <[REDACTED]> U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Timothy H.
Kass, MS,
CIH, CSP



Dear Ms. Chang,

I am writing this email to express my support for ensuring that the Grasse River is cleaned up in a safe, sound and responsible manner.

I have a vested interest in this project on many levels. First, I with my family live near and utilize the river for recreational use. Second, I have spent the majority of my working career in the environmental, health and safety field. And, finally, I am an Alcoa employee (although relatively new to the company having only hired on in August 2011).

I appreciate the many years of scientific study done on the river to determine the various options to clean up the PCB's that had accumulated. Determining the best option is a difficult decision because you always wonder if there is some more knowledge out there that's yet to be discovered (to which the answer is always yes) that will significantly change or affect any decision made now (to which the answer is not always). In a perfect world, all of the PCB's would be removed, but the world is not perfect. We make decisions based on the best knowledge that can be obtained at the time.

The Grasse River is an important resource to the area and Alcoa, who would bear the cost of the cleanup, is

11/19/2012

likewise a important employer to the area. While the community deserves a clean river, Alcoa should only have to bear the burden of a cost-effective remedial plan that protects human health and the environment.

It is time to move forward with a plan from these near two decades of expert study and input from many people so that the community can begin experiencing the benefits of the remediation. I have reservations about dredging because it would release PCB's from the soil into the ecosystem, not only here, but downstream. So, I tend to want to leave the material in place by capping it. This is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. However, I can see where some areas (due to the level of contamination) might be worthwhile removing. This makes the option recommended by the EPA a reasonable alternative.

I fully support this reasoned approach and am against the more radical remediation options.

Please move forward with this project so everyone may benefit.

Sincerely,

Timothy H. Kass



Grasse River Remediation
Cook, Shannon M to: Young Chang

11/09/2012 10:18 AM

From: "Cook, Shannon M" <Shannon.Cook@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

1 attachment



Picture (Device Independent Bitmap) 1.jpg

Dear Mr. Young,

I am writing you to express my concern about the Grasse River Remediation. The DEC has approved a plan to cap and dredge the river to protect the environment. I believe this plan is in the best interest of the community and Massena Alcoa Plant.

I recently left my job in Buffalo, New York working for General Motors to take a job at Alcoa in Massena. I did this to be closer to my family and to be back in the area where I grew up as a child. It is very important to me and my family that Alcoa stays in Massena. With the recent decline in jobs in this area, the closing of the Alcoa Plant would be devastating to Massena and the surrounding areas.

I hope you move swiftly to implement the plan put forward on the remediation of the Grasse River for the future of the north country.

Thank you for taking the time to read my letter.

Sincerely,
Shannon Cook

Shannon M. Cook
Aluminum Services Flow Leader
ALCOA West Plant
Massena, N.Y. 13662
Shannon.Cook@Alcoa.com
315-764-4721 (work)
315-705-1244 (cell) 4604 (fax)
[cid:image013.png@01CC98A3.4174DA10]



Remediation Project in Massena NY

Francis Lallier

to:

Young Chang

11/09/2012 02:43 PM

Hide Details

From: Francis Lallier <[redacted]>

To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Chang,

Please accept this letter as support for the Grasse River remediation project in Massena NY. The plan as it has been explained sounds like it addresses all concerns in an economical and environmentally friendly manner. The community of Massena needs closure on this issue in order to move in a new direction economically and socially. The waterways in the area are a great source pride and recreation. Sins of the past need to be rectified and I think the local plant, Alcoa has accepted the project cost and will continue to be great proponents of future environmental issues.

I just wish the reparation of the upstream dam was also included. This dam was breached 14 years ago by a tree during the spring snow melt. It is my understanding that having the dam in place would further aid the capping project by reducing the risk of ice heaves and add to the recreational value of the river. Please consider this in your approval of the remediation project.

Thank you.

Frank Lallier
General Manager
Blevins Seaway Motors

[redacted]

Eowyn Hewey

U.S. FOIA Exemption 6 Redaction

November 9, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

I, Eowyn Hewey, am writing to express support for a Grasse River cleanup plan that is based on sound science.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also reasonable approach.

I strongly encourage the process to move forward after nearly two decades of expert study and input from many people, so that the community can begin experiencing the benefits of the remediation.

I recognize the importance of the Grasse River and Alcoa's presence in the community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,000 hardworking men and women and supports many community organizations. I am one of those employees supporting myself and two children in St. Lawrence County.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely,



Eowyn Hewey
St. Lawrence County Citizen



Adam Knowlton
U.S. FOIA Exemption 6 Redaction

November 9, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007

Dear Mr. Chang,

I am writing you this letter in support of ALCOA in regards to the Grasse River clean-up in Massena, New York. As a concerned citizen of St. Lawrence County this clean up has me concerned for a few different reasons. First off, this has been an issue for many years. I feel that it is time for the EPA to make a final decision and in a timely manner. Lets get this settled once and for all so that the community can finally benefit from this. Second, I feel that the dredging could pose harm to both humans and wildlife. It concerns me because we are taking whats bad in the river and then taking it to another location to store it where it could possibly become a threat later on in life. We really don't know what the impact will be 100 years from now. Third, it will never be possible to get all the contaminants out. How much will dredging stir up contaminants that could possibly effect another part of the river or even effect the St. Lawrence River?

I would agree with the EPA on whatever cleanup they chose. However, I do agree with the capping remedy that ALCOA has recommended. Fifteen years of studies have shown capping to be protective of human health and the environment. This would help nature do what it is already doing naturally.

I ask you Mr. Chang and the EPA to chose the clean up that ALCOA has found to be most beneficial. If this is not acceptable then I stand behind the alternative recommended by the EPA. I am sure you are well aware of what else is at stake here Mr. Chang. Well paying jobs that are vital to this community. If the clean-up is too costly I fear ALOCA and Massena will lose jobs VITAL to this north country economy. ALCOA does not just employ people from Massena but also from town all throughout St. Lawrence and Franklin county. Over 1,000 jobs are at stake here Mr. Chang. I ask you and your colleagues to chose an option that can be cost effective for ALCOA and also beneficial to the Grasse River...Thank you for your time.

Sincerely yours,

Adam Knowlton



Grasse River Cleanup
CORDWK1

to:

Young Chang

11/09/2012 12:22 PM

Hide Details

From: U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



Young Chang Letter.pdf

Dear Mr. Chang,

Please accept the following letters from members of the community on the Grasse River Cleanup.
See Attached.

Thank you for your consideration of these letters.

Kelly Cordwell for Michelle Williams

11/19/2012

① JOHN WILLIAMS

② MICHELLE WILLIAMS

③ SCOTT MANLEY

④ NANCY MANLEY

10/30/12

Ms. Young Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

We are property owners on the Grasse River above the Superfund designated area. We have, however, followed the cleanup process with interest. It is clear that your decision will have a significant impact on not only the river, but the community. I am satisfied that sufficient studies have been done to understand the impacts of the PCB's as well as the impacts of proposed remediation options. The damage that was done 50 years ago cannot be healed, but the EPA can put the river on a path toward continuing to improve its long term health. Similarly, EPA, by rendering their decision now can help put this matter behind the community and allow us to move forward.

Thank you for your consideration of our opinion.

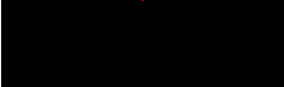


John Williams



Michelle Williams

U.S. FOIA Exemption 6 Redaction



cc: [redacted]
[redacted]
[redacted]
[redacted]
[redacted]

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang:

I am writing today to express my opinion of support for the Grasse River Cleanup that the Environmental Protection Agency has endorsed.

Alcoa and your agency have conducted studies for close to 20 years. It is my strong belief that 20 years is sufficient to form a scientific foundation on which to make a recommendation.

We need not wait anymore to do more studies. The environmental community kept demanding more studies on the Grasse River for Massena Electric on the proposed hydro generating station. The fact is that the environmentalists involved were trying to spend MED into submission. They won that battle. In this case, I am hopeful that your agency will, based on what must be volumes of information, adhere to the conclusion you have already reached.

This has been a horrible period in Massena's history and we need to begin a new era. It has been bad for our economy, bad for our employers, bad for community spirit and awful for our environment. A new era begins when you issue your record of decision and I encourage you to move on this recommendation as soon as possible.

Sincerely,



Nancy Manley

U.S. FOIA Exemption 6 Redaction



November 9, 2012

Young S. Chang
Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

I am writing to you in regards to the Grasse River remediation project. I am a long time resident of Massena, NY and wish to express my opinion on the project.


Alcoa, in collaboration with The U.S. Environmental Protection Agency, key stakeholder groups, and scientific experts, has invested considerable time and resources to conduct research and pilot studies to determine the best ways to remediate the contamination issues in the Grasse River. I believe that the EPA's Proposed Remedial Action Plan for the Grasse River will provide an effective solution that is based on data and sound scientific principles.

Alcoa's continued presence in Massena is vital to the region's viability. Selecting an effective and reasonable solution to the Grasse River remediation and proceeding with the remediation is of the utmost importance to our community and the surrounding region.

I support the EPA's Proposed Remedial Action Plan for the Grasse River and urge the EPA to move forward with the remediation process.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in cursive script that reads "Jeffrey Stenlake".

Jeffrey Stenlake



Grasse River Cleanup

Mark Cornett

to:

Young Chang

11/10/2012 11:19 PM

Hide Details

From: Mark Cornett

U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Mr. Young,

I am a resident of St. Lawrence County. I wish to express my support for Alcoa's capping remedy plan for addressing the Grasse River cleanup. I encourage the EPA to move forward with its Proposed Remedial Action Plan and issue a Record of Decision at its earliest possibility. Thank you,

MC

Mark J. Cornett

U.S. FOIA Exemption 6 Redaction



Grass River Clean-up Plan
fcassort1 to: Young Chang

11/14/2012 12:19 PM

From: **J.S. FOIA Exemption 6 Redaction**
To: Young Chang/R2/USEPA/US@EPA

Frederick J. Cassort

November 11, 2012

J.S. FOIA Exemption 6 Redaction

Young S. Chang,

I am writing this in support of a Grass River clean-up that is based on sound science. Fifteen years of scientific study shows a capping remedy is protective of human health and the environment effective over the long term and complements the natural recovery already happening in the river. The alternative recommended by EPA is also a reasonable approach.

I encourage the process to move forward after nearly two decades of expert study and input from many people, so that the community can begin experiencing the benefits of the remediation.

Alcoa's presence in the community is huge. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,000 hard working men and women, I being one of them, and supports many community organizations.

The community deserves a clean Grass River, Alcoa deserves a cost-effective remedial plan that protects both human health and the environment. As someone that lives close to the rivers edge I enjoy fishing and recreational activities on the river, so this decision will effect myself and my family along with everyone else along the river. I would like to continue working at Alcoa and hope the future generations get that oppportunity to work here also.

Thank You Very Much,

Frederick J. Cassort

Young S. Chang, Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

November 12, 2012

Dear Ms. Chang:

I am writing to comment on the proposed remediation of the Grasse River in Massena New York. Before I comment I would like to give you a little background about myself. I am a long standing salaried employee of Alcoa, spending more than 30 years working at both the West Plant and the East Plant. I am also a resident of more than 20 years of the small community of Massena Center, which is adjacent to the Grasse River approximately 3 miles downriver from the Alcoa West Plant. I personally own property across the road from the Grasse River. I have swum, boated and canoed in the Grasse River and skated on the Grasse River.

I have thought quite a bit about the remediation of the river because I believe I am an environmentalist in practice (recycle my garage, purchase/install energy efficient lighting, live in an older (approx 150 years) home, drive higher mileage cars, etc.). I believe I have also passed this on to my kids (one drives a hybrid, works for GE Energy, the other works for a Green Company in Vermont). I am also a dedicated long standing salaried Alcoa employee that has received the benefits of working for a good company and want others to have the same opportunity. During my thoughts about the Grasse River I have wanted to make sure I strike a balance between what's best for the environment and local employment.

As I thought about the Grasse River and its contamination my first thought has been, I wish it wasn't there. Obviously it is there and there is nothing we can do about that so now I begin to think about what is the best way to handle the contamination. I believe that your proposed solution offers the best opportunity to minimize further contamination. As I understand the proposal, the majority of the river will be capped with material that will ensure no further contamination, I also understand in some areas where the risk is high for cap disturbance you recommend dredging and moving this material to a more secured site. I also understand the proposal includes some frequency of monitoring to ensure that the protective cap stays in tack. This proposal seems very reasonable and is even supported by nature. I understand that nature has already begun the capping process.

I also understand that some individuals believe that dredging the whole river is the ultimate solution. I have thought about this and I cannot agree. As I mentioned above, I to wish that the contamination was not there, however now that it is there I believe that moving it (dredging and transporting to a landfill) will result in further contamination from both the dredging process and to the land where the materials would be stored.

I also know that your recommended solution comes with a pretty hefty price tag, approx. \$250 million. Unfortunately this will be a financial burden on Alcoa; however I believe that this is necessary to ensure no additional contamination occurs.

Thanks for your serious consideration of my comments.

Sincerely,

A handwritten signature in black ink that reads "Mark Southwick". The signature is written in a cursive style with a large, stylized initial "M".

Mark Southwick



Grasse River Remediation project proposed by ALCOA and the EPA for Massena, N.Y.

Michael McGee

to:

Young Chang

11/12/2012 09:44 AM

Hide Details

From: "Michael McGee" <[REDACTED]>

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



image002.jpg

In regards to the Grasse River Remediation project proposed by ALCOA and the EPA for Massena, N.Y. and the St.Lawrence River:

It appears to me, a 20 year study conducted by various environmental -ecological research companies and scientific experts, all working in concert with the Environmental Protection Agency, shows good faith by ALCOA and assures transparency in its findings.

The fact that the EPA has received and reviewed 10 proposals, with alternatives ranging from no cost to more than \$1.2 billion, offers credence and provides realistic data for assessment.

It is the option of this writer, who lives in Waddington, N.Y, to support the Agency's proposed plan for the dredging of some near-shore sediments, capping in the main channel, and armored capping in ice-scour prone sections of the river.



STRUCTURALWOOD
CORPORATION

Michael J. McGee
315-388-4442



Alcoa remedial action plan
Jerry Mahoney to: Young Chang

11/12/2012 02:27 PM

From: Jerry Mahoney **U.S. FOIA Exemption 6 Redaction**
To: Young Chang/R2/USEPA/US@EPA

Dear Mr. Chang,

We support the EPA's proposed remedial action plan to address the contamination in the Grasse River. As lifelong residents of northern New York we realize the importance Alcoa plays in the economy of this area. If you were to direct Alcoa to fully dredge the seven miles of river from their plant to the mouth of the St. Lawrence River the cost would be prohibitive and in all likelihood would force them to cancel their modernization project that is so desperately needed here.

Thank you for your consideration.

Jerry and Mary Carole Mahoney

Sent from my iPad

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

As North Country resident, I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena and major supporter of the region's non-profit and civic organizations. The entire community relies on the jobs and goodwill provided by this important corporate citizen.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely:

Penelope J. Fargo

My daughter in law is an Alcoa employee so I realize how important this project is.

I also have a sister in law who has lived in Massena forty plus years and it would be devastating for the community of Massena if Alcoa was no longer an employer in that area.



Letter of Support for Grasse River EPA Proposal
Sheets, Tracey A. to: Young Chang

11/13/2012 12:49 PM

From: "Sheets, Tracey A." <Tracey.Sheets@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

1 attachment



AR-M355N_20121113_140813.pdf

Please see attached letter.

Thank-you,

Tracey A. Sheets

11/13/2012

November 13, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Mr. Chang:

I am writing to express my support for the current solution proposed by EPA for the Grasse River Remediation in Massena, New York. It is based on decades of research, scientific study and extensive collaboration and it protects the environment as well as the human health of people like me and my family who are living here. My family and I enjoy boating and fishing, and this solution will provide waters where we can fish, and then teach our two boys how to skin and cook the bounty of our day.

In addition to being a twenty-five year resident of Massena, I have also been employed by Alcoa for these twenty-five years. Alcoa is an integral part of our community, from providing employment opportunities to supporting charitable causes. I am active in many local charitable organizations and very appreciate the support provided by Alcoa. Please move the current EPA proposal forward so that Alcoa, the environment, and the health of Massena residents may thrive for decades to come.

Sincerely,



Tracey A. Sheets

U.S. FOIA Exemption 6 Redaction





Grasse River Cleanup

Haley, Dan

to:

Young Chang

11/13/2012 08:08 PM

Hide Details

From: "Haley, Dan" <[redacted]>

To: Young Chang/R2/USEPA/US@EPA

DATE: 11/14/12

Daniel N. Haley & Laurie B. Haley

[redacted]

Mr. Chang S. Young,

My wife and I are emailing you to ensure you of our support of the Grasse River Cleanup that was recently proposed by the EPA and agreed upon by ALCOA as of October 1st, 2012.

The plan calls for the dredging of some near-shore sediments, capping in the main channel and armored capping in ice-scour prone sections of the river. We believe that this process needs to move forward for the safety of the environment, the needs of the community, and for the financial and economic future of ALCOA in Massena. My wife and I actually own property on the Grasse River and believe that this solution is both environmentally sound at a cost that is feasible for ALCOA to commit to so they can continue with the Modernization program that is so essential to the economic future of the Massena community.

We thank you for your time and consideration on this matter,

Daniel N. & Laurie B. Haley



Support of the Grasse River Cleanup Plan
Marsh, Steven F. to: Young Chang

11/13/2012 10:32 PM

From: "Marsh, Steven F." <Steven.Marsh@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Young:

I am writing to express my support of the EPA's Grasse River cleanup plan in Massena, NY. I am a lifelong resident of Massena and have been an Alcoa employee since 1996. As you are likely aware, Alcoa is the largest employer north of Syracuse. The company provides high paying jobs for more than 1,000 hardworking men and women and supports many community organizations. It goes without saying that Alcoa is vital to the economy of Northern New York and the Grasse River is an important natural resource in our community.

Alcoa's local leadership and corporate environmental management team recently shared the EPA's proposed Grasse River cleanup plan with Massena employees. After viewing the proposed actions, I am convinced the plan is based on sound science and encourage the process to move forward after nearly two decades of expert study and input from many people, so that the community can begin experiencing the benefits of the remediation.

Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, is effective over the long term and complements the natural recovery already occurring in the river. However, I feel the alternative recommended by EPA is also a reasonable approach. The community deserves a clean Grasse River. At the same time, Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

As someone who lives near this important waterway, the outcome of this process directly affects me and my family. As an Alcoa employee, I am eager to see the process move forward and I am confident Alcoa is committed to working with the EPA to implement the recommendation contained in the PRAP.

Thank you for time and consideration. I appreciate your involvement in this important initiative.

Sincerely,

Steven F. Marsh
Senior ABS Specialist
Alcoa Primary Metals
P.O. Box 150
Park Avenue East
Massena, NY 13662-0150

U.S. FOIA Exemption 6 Redaction

November 13, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Attn: Remedial Project Manager Young Chang

Please accept these brief comments in support of the Grasse River PRAP that has been presented. I am a retiree of Alcoa in Massena and I have seen the damage that uncontrolled regulators can do. The PRAP you have presented is remarkably balanced. While the process to get to this point was far too long, it makes it obvious to me that the conclusion you reached should be completely defensible.

The cleanups throughout Massena were clearly required but need not have been so complicated and over blown. It has had an adverse impact on business in the community, the psyche of the community, and the environment.

It was time to move on quite a while ago. You have my support and encouragement to promptly enact the PRAP that you shared with the community.

Thank you,

A handwritten signature in black ink that reads "Jack Morgan". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

Jack Morgan

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River. The proposed remedy is not a protective remedy nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/ Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit. For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for traditional Mohawk uses the toxins must be removed.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,



I am requesting a response letter:

Name (print): MARY WAINMAN

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

U.S. FOIA Exemption 6 Redaction

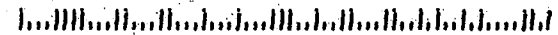
SYRACUSE NY 130

13 NOV 2012 PM 1.1



YOUNG S. CHANG, REMEDIAL PROJECT MANAGER
U.S. ENVIRONMENTAL PROTECTION AGENCY
290 BROADWAY, 20TH FLOOR
NEW YORK, N.Y. 10007-1866

10007186699



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Kathleen C. Jock

I am requesting a response letter:

Name (print): KATHI C. JOCK

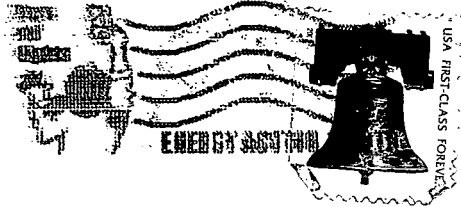
Address

City

U.S. FOIA Exemption 6 Redaction

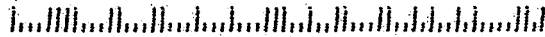
SYRACUSE NY 130

13 NOV 2012 PM 2 L

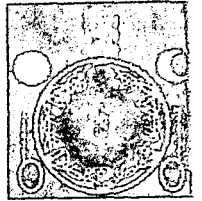


YOUNG S. CHANG,
Remedial Project MANAGER
U.S. ENVIRONMENTAL PROTECTION AGENCY
290 BROADWAY, 20th FLOOR
New York, NY
10007-1866

10007186699



Territory of the
Onkwehonwe Signatory Tribe
Via P.O. Box 147
"Rooseveltown, NY 13683"
518-651-9091



Americus Empire
(A.K.A.) Turtle Island

November 13, 2012

Environmental Protection Agency
Ariel Rios Building
12000 Pennsylvania Ave N.W.
Washington, DC 20460

Attention: Lisa Jackson

In the process of exercising our Onkwehonwe Signatory Tribal jurisdiction, we command you and your appropriate bureaucracy to immediately address the matter of the Aluminum Company of America "ALCOA" industrial poisoning to earth, people and animals, regarding the Grasse River PCB contamination.

We are referring to the Aluminum Company of America "ALCOA", Massena Plant situated on land within the territory of the Onkwehonwe Signatory Tribe in what is known to you as "Massena, New York." Whatever the agreements of the past were between your Federal, State and autonomy Indian government, you are hereby given legal notice that our Tribal Law supercedes all said agreements. Your government is commanded by the authority of Causus Omississ Clanmother to remove all contaminated land above and below the ground that constitute a threat to the health of our people, animals, plant life and waters.

Many of our peoples' health have been seriously affected due to contaminants in the water, the air, and the earth itself so there is no need to issue monies to do studies that result in meaningless talks.

Your proposed plan is unacceptable. Therefore your government is hereby commanded to begin the total clean-up immediately, and you are reminded that we are a Signatory Tribe of the ancient Onkwehonwe Confederacy ruled by First Law of the Land and not an autonomy native government or corporate charter under your State or Federal jurisdiction. You are ruled by Corpus Juris Secundum, second law of the land.

Respecting Law,

Kamitakeron "Jimmy Thompson"

Headman

Beard

Clan



Cc: Judith A. Enck, U.S. Environmental Protection Agency
N.Y.S. Department of Environmental Conservation
N.Y.S. Governor Andrew Cuomo
N.Y.S. Senator Charles Schumer
Aluminum Company of America
President Obama

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Carolyn White

I am requesting a response letter:

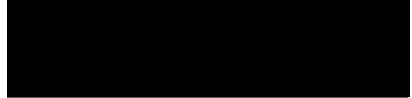
Name (print): Carolyn White

Address:

City:

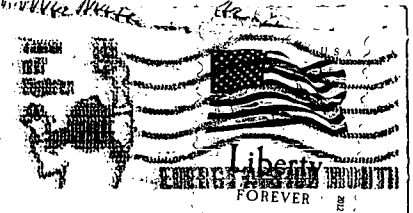
U.S. FOIA Exemption 6 Redaction

Mohawk Vision
U.S. FOIA Exemption 6 Redaction



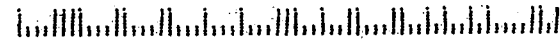
SYRACUSE NY 130

13 NOV 2012 PM 1.1



Young S Chang Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York N.Y. 10007-1866

100071866



November 13, 2012

13662

U.S. Environmental Protection Agency
 290 Broadway, 20th Floor
 New York, N.Y. 10007-1866

Attn: Young S. Chang

Re: E.P.A.'s involvement in Grasse River

To Whom it May Concern,

First and most important to my life and death, is I am a totally committed Christ (ian) woman of 65 years. I have lived in my home on the Grasse River, one half of my life.

I have no faith in the E.P.A. members to individually know Christ in their lives. Do to do what is best for us (under God), who live along the Grasse River and in the community of Massena, Our hometown.

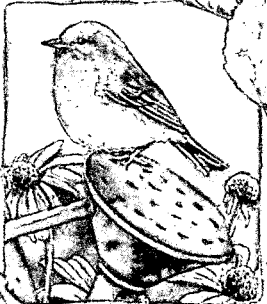
I am very much opposed to the E.P.A. forcing any cleanup of the Grasse River. Leave the river and its future in the hands of God. And pray.

Alcoa has worked long enough and expended enough money. (1) "Alcoa had spent 15 years and \$165 million on Grasse River cleanup research ---"

The E.P.A. should choose the "do nothing" (1) option. God remains very much in Control of His Creation.

(1) Daily Courier Observer, October 2, 2012.

Sincerely, In Christ,
 Kathleen S. Hiltman



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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Sken:nen,



I am requesting a response letter:

Name (print): David DeCillies

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**



Mr. David Decilles

U.S. FOIA Exemption 6 Redaction

SYRACUSE NY 1320

14 NOV 2012 PM 5 L



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

ITALIAN-AMERICAN CIVIC ASSOCIATION of MASSENA, INC.
 16 BEACH STREET
 MASSENA, NEW YORK 13662

November 14, 2012

Ms. Young S. Chang
 Remedial Project Manager
 U.S. Environmental Protection Agency
 290 Broadway, 20th Floor
 New York, NY 10007-1866

Dear Ms. Chang:

I write today on behalf of the Italian American Civic Association of Massena. I am the President of the Association that counts over 400 members. Among our members are elected officials, business leaders and countless blue color workers who are the fabric of this community. Typically, the membership is from families that have been here multiple generations. Often, those families count one or more members of their families as Alcoa employees.

The decision that is before EPA effects the community as well as the environment. Your proposal has been passed around amongst our members – and we have reached the obvious conclusion that it is time for EPA and Alcoa to move forward. We agree with the “Rationale for Selection” as described on page 25 of your proposal and supported by Table #1.

For your consideration I have asked other members who are available and concur with this letter to ascribe their name and address to this letter. Should you have any further questions please direct correspondence to me at the above address.

Sincerely,

James A. Bronchetti

James A. Bronchetti
 President
 Italian American Civic Association of Massena Inc.

Print Name	Signature	Address
Charles R. Boots	<i>Charles R. Boots</i>	U.S. FOIA Exemption 6 Redaction
Peter H. Wilds	<i>Peter H. Wilds</i>	
Rick Anfeld	<i>Rick Anfeld</i>	
SAMUEL A. CAPPIONE	<i>Samuel Cappione</i>	
Amedeo Cappione	<i>AMEDEO CAPPIONE</i>	
<i>ROSSI</i>	<i>ROSSI</i>	
DANIEL BRONCHETTI	<i>Daniel Bronchetti</i>	
SANDY ROMEO	<i>Sandy Romeo</i>	
Timothy Blais	<i>Timothy Blais</i>	
Richard BLAIS	<i>16 Pleasant St Massena</i>	
Francis P. Cappione	<i>FRANCIS P. CAPPIONE</i>	
<i>Anthony J. La Rosa</i>	<i>ANTHONY J. LA ROSA</i>	

Print Name	Signature	Address
IRA A. FULLER	Ira A Fuller	U.S. FOIA Exemption 6 Redaction
JOHN MORGAN	John Morgan	
Debbie Mitras	Debbie Mitras	
PEGGY CURTIS	Peggy Curtis	
Tina Legge	Tina Legge	
JOAN SKORONET	Joan Skoronet	
CHS CAZZO	Chs Cazzo	
DAVID POLAROLO	David Polarolo	
Barry Crary	Barry Crary	
John Abraham	John Abraham	
GARY FULLER	Gary Fuller	
Benton Harvey	Benton C Harvey	
FRANK LACERONZA	Frank Laceronza	
GERARD A MATTIO	Gerard A Mattio	
THOMAS GRAMUSLIO	Thomas Gramuslio	
DIANEV HAZELTON	Diane H Hazelton	
Andrew Post	Andrew Post	
Alan McGrath	Alan McGrath	
Robert Pat	Robert Pat	
James B Pace	James B Pace	
PAUL BLAVINS	Paul Blavins	
Richard F. Cloopy	Richard F. Cloopy	
Charles McGee	Charles McGee	
Jim Lallier	Jim Lallier	
Frank Lallier	Frank Lallier	
DAVID KENNEDY	David Kennedy	
Phillip Ashley	Phillip Ashley	
Edward J. Fan	Edward J. Fan	
Juan Bouchard	Juan Bouchard	
John W. Whalen	John W. Whalen	
Joseph Catalina	Joseph Catalina	
Charles Negus	Charles Negus	
VINCE PERRY	Vince Perry	
William Helmer	William Helmer	
Genovaro Conte	Genovaro Conte	
John Bogesian	John Bogesian	
Jim Worsan	Jim Worsan	
Joc Daniel	Joc Daniel	
TONY FIACCO	Tony Fiacco	
Steven Greene	Steven Greene	
LARRY FRENCH	Larry French	
Robert Francis Jr	Robert Francis Jr	
Walter Mulysa	Walter Mulysa	
Richard G. Shippey	Richard G. Shippey	
HARRY CONVELL	Harry Convell	
Howard Williamson	Howard Williamson	
FRED S. LABA	Fred S. Laba	

James M. Shaw PE

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
November 14, 2012

Dear Ms Chang:

I appreciate the opportunity to address you and the Agency with my comments on this very important issue for our community and the Grasse River environment. My name is James M. Shaw. I have lived in Massena for 45 years. I am the Chairman of the Massena Electric Department and retired from Alcoa 10 years ago, after 35 years in many professional positions. My last position was Environmental Manager. I am also a licensed Professional Engineer.

When I started work for Alcoa in the 1960's the Company purchase and used hydraulic system fluids that were formulated to be non-flammable. This was done to protect the employees from serious burns and fatalities that could result should a hydraulic system develop a leak near a source of ignition. This was believed to be a good thing. The primary ingredient in these oils to make them non-flammable was Polychlorinated Biphenyls or what we now all call PCB's. PCB's were also used in paints and other coating to reduce flammability. As you can see the introduction of PCB's in to Massena Operations was done as a safety measure for employee protection. In the 1970's as we all became more knowledgeable of chemical and environmental impacts, it was determined that PCB's presented potential health risks. The Company began a concerted effort to eliminated the use of these oils from the plant. During the 1980's and 1990's, Alcoa worked with primarily the NYSDEC and expended significant effort and funds to remediate the plants site of PCB contamination and virtually eliminate any discharges of PCB's to the Grasse River.

As you are well aware the EPA designated the Grasse River as a Superfund Site and Alcoa has been studying the River for nearly two decades under the guidance of your agency and other stakeholders. Finally a proposed remediation plan has been issued and we are here to comment on it. As required Alcoa has proposed to the EPA a number of alternatives for the cleanup of the River with estimated costs and remedial benefits. There has been significant research and scientific study to develop these alternatives. Many groups and individuals have strong opinions on which and how extensive the remedial efforts should be implemented. It is always hoped that a compromise can be reach and result in agreement to the final solution. I believe you have reached that compromise in this case. I strongly urge you to move forward with your record of decision recommending this alternative and work to insure that the engineering to accomplish this alternative is appropriate, cooperative, timely and does not lead to specification creep.

I look forward to the issuance of the record of decision for this alternative, which will then allow the Community and our very important employer, Alcoa, to move forward with their growth and development plans.

Sincerely


James M. Shaw PE



Proposed Grasse River Project

John Bogosian

to:

Young Chang

11/14/2012 01:18 PM

Hide Details

From: "John Bogosian" <[REDACTED]>

To: Young Chang/R2/USEPA/US@EPA

I fully support the EPA's proposed \$243 million remedial action plan for the Grasse River. Alcoa is the major employer in the area and we need to retain that employment for the area as well as allow the EPA oversight in this cleanup project. Thanks for your consideration. John M. Bogosian, CEO, St. Regis Nursing Home



Alcoa Proposed Project

John Bogosian

to:

Young Chang

11/28/2012 01:43 PM

Hide Details

From: "John Bogosian" <[REDACTED]> U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

My name is John Bogosian and I am the CEO of the St. Regis Nursing Home in Massena, NY. I am aware that one of the options of the cleanup of the Grasse River is to fully dredge the river. In my opinion, that would not be the best way to deal with the issue. The best options would be 3, 4, 5, or 6. Thank you for your consideration.
John M. Bogosian, CEO

November 14, 2012

Martha Maynard

U.S. FOIA Exemption 6 Redaction

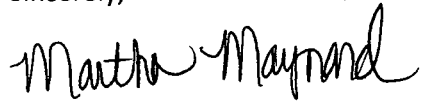
Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang:

I'm writing in support of the recommended cleanup of the Grasse River – alternative #6. I think that 15 years of scientific study is long enough and urge the process to move forward. This chosen remedy complements the natural recovery that has already occurred in the river.

I want Alcoa to continue to have a presence in Massena, NY. Alcoa provides more than 1,000 good paying jobs and is a valuable contributor to the North Country area. I live near the Grasse River, do some kayaking/canoeing on the river and I also work at Alcoa. So I encourage EPA to move forward on the cleanup efforts.

Sincerely,



Martha Maynard



Grasse River Remediation Plan - Support of EPA Proposal

Bill Gerber

to:

Young Chang

11/14/2012 03:26 PM

Hide Details

From: Bill Gerber U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



EPA - Grasse.pdf

Ms. Chang -

Please find attached a letter in support of EPA's prompt implementation of the recommended remediation plan for the Grasse River, in scanned PDF form.

I will send a hard copy via US mail if this emailed version will not meet your needs. Please advise if this is the case.

Thank you,
Bill Gerber

11/19/2012

November 14, 2012

U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
Young S. Chang, Remedial Project Manager

Dear Ms. Chang:

Please accept this letter in support of the EPA's prompt implementation of the plan recommended in the recently issued PRAP.

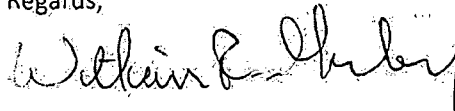
It is my opinion that the capping remedy is the best option of those considered, as it is protective of human health and the environment and is a substantially more cost-effective solution. That said, continued study and debate will not result in a better solution, rather it would only serve to delay the community's opportunity to benefit from the completion of any effective solution.

After 15 years of study and input from all affected parties, it is time to move forward and ensure:

- the Grasse river is clean
- Alcoa has a clear understanding of the requirements and costs for future planning
- Both are here and beneficial to the community now and for generations to come.

Thank you and all those in your agency who've worked so hard to find a solution that meets rigorous scientific standards that also addresses as many of the emotion-driven desires of the many stakeholders in the process.

Regards,



William R. Gerber



Alcoa Remediation Project

Terry Perkins

to:

Young Chang

11/14/2012 06:39 PM

Hide Details

From: "Terry Perkins" U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Dear Sir,

I am writing you this letter to ask you to think about the importance of Alcoa to the North Country. I'm a native of Massena, NY and work at Alcoa. I, as many others, want Alcoa to remain in the North Country to provide good wages to over 1,000 employees. If Alcoa was to leave the North Country it won't only affect its employees, it will distress the whole region with its trickle down affect. The loss of GM has affected the North Country and the people here. We have lost many young people and many good jobs because of GM closing. So I am asking you to work with Alcoa to keep the Grasse River Remediation Project cost effective. It means so much more than anyone can imagine.

Sincerely,
Terry Perkins

11/19/2012



Akwesasne Wolf Belt

Box 579, Cornwall, Ontario K6H 5T3

MOHAWK COUNCIL OF AKWESASNE OFFICE OF THE GRAND CHIEF

14 Kentenhkó:wa/November, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Greetings,

We are writing to you concerning the Proposed Remedial Plan for the Grasse River in Upstate New York. We are residents of Akwesasne and I specifically represent Kawehnoke (Cornwall Island) which is located opposite the mouth of the Grasse River. Collectively the Grand Chief and the Mohawk Council of Akwesasne is representative of islands and adjacent land along the St. Lawrence River for miles above and below the Grasse River.

On October 28th, 2012, we attended a community information session on the Proposed Remedial Plan organized by the Akwesasne Task Force on the Environment. Surely you can appreciate our interest and concern seeing the mouth of the Grasse River is only several hundred yards away from Kawehnoke, with many of our community's water intake systems being downstream from the mouth of the Grasse River.

We are developing an Economic Recovery Strategy and strengthening Eco-Tourism in the St. Lawrence River is an integral part of the vision we have for the river. Having fish that is edible and promoting the St. Lawrence River fishery adjacent to and down river from the mouth of the Grasse River will be critical to meeting our future economic needs and must be considered in the selection of remedial alternatives for the Grasse River.

We have reviewed EPA's preferred remedy for the PCB-contaminated sediments in the Grasse River. While we support the dredging of 108,700 cubic yards of near-shore contaminated sediments, it is not enough. We find it unacceptable that EPA will allow the most PCB-contaminated part of the river, the main channel, to remain untouched in the river. We can find no justification for leaving over 1.5 million cubic yards of heavily PCB contaminated sediments in the river.

We also find unacceptable EPA's proposal that if ice scour is able to penetrate the proposed armored cap that the solution is to fix the cap. At that point, it will be too late and it will be our community that will suffer the consequences as will the fish, animal, and plant life in the river. If the cap should fail, EPA should require Alcoa to remove all of the contaminated sediments. Test caps have already failed and we should learn from that experience and not repeat the mistakes of the past.

Mohawk Gov't Office 613 575-2348



Admin. Office 613 575-2250

It is important to note that climate change has greatly increased the likelihood of severe weather events occurring and that the remedial alternative must be responsive to those occurrences. Hurricane Sandy has shown the power of nature. Last year, we experienced two tornado warnings that have been unheard of in our area. We are also in an earthquake zone. It is all of our responsibility to plan for the worst case scenario. EPA's Preferred Remedy fails to do that.

We acknowledge the work that Alcoa has done to remediate onsite PCB contaminated areas and to stop discharging PCBs to the river. However, we are concerned that remediation of the Grasse River is far short of what they have accomplished in remediating their property. If General Motors and Reynolds Metal Company could remove heavily PCB contaminated sediments from the St. Lawrence River, Alcoa can do the same in the Grasse River using the same proven technologies.

We believe that Alternative 8 should be the proposed remedy. It requires dredging of approximately 20% of the most heavily contaminated sediments in the main channel plus the 109,000 cubic yards in the near shore. It should target hot spots and areas most likely to experience ice scour.

From our perspective, the harmful toxins contained in the shoreline and riverbed areas of the Grasse River, need to be removed. The placing of a rock/sand cap over the affected areas of the main channel without removing hotspots and areas likely to be affected by ice scour merely suppresses this dangerous situation and passes it off to future generations. Removal of substantial amounts of PCB-contaminated sediments is required in order to restore our confidence in the integrity of that portion of the river system.

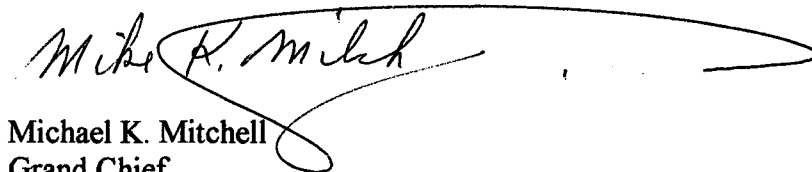
This is our view on the matter.

Skén:nen/In peace,

MOHAWK COUNCIL OF AKWESASNE



Brian Wm. David, Chief
Kawehnoke



Michael K. Mitchell
Grand Chief

November 14, 2012

U.S. FOIA Exemption 6 Redaction



Young S. Chang

Remedial Project Manager

U.S. Environmental Protection Agency

290 Broadway

20th Floor

New York, New York 10007-1866

Environmental protection Agency

Hello. I am submitting my personal comments for the record pertaining to the ALCOA-Massena Grasse River EPA Cleanup. I support the remediation to the highest level possible, at any cost required to do so, by any parties involved.

The recent public comments concerning this regional watershed clean-up by the Village of Massena Mayor James Hidy and Village of Massena Trustee Timothy Ahlfeld deserve a dissenting voice. To do anything less than the finest clean-up possible is short-sighted, mean-minded, and speculative at best.

Their neighbors, living in Akwesasne, as well as others living downriver of Massena, deserve to see this cleanup done the right way. A right to a wrong from an earlier time, but also a way to send a signal to neighbors, friends and allies.

The Town of Massena was formed in 1802, not coincidentally the same year that the St. Regis Band of Indians tribal government was established. Before these trustee governments were formed, people here co-existed on this same Grasse River, in friendly, neighborly ways.

Who would want to upset that apple cart? Massena benefits from being located ten miles closer to Akwesasne than does Malone. The commercial and retail numbers make this clear. Yet I have had citizens of Massena ask me to support a short-term fix to a long-term problem.

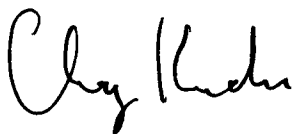
The speculation of ALCOA having a set amount in mind to spend on either the cleanup or the plant modernization should come to a halt. ALCOA can end this empty debate of headlines and conjecture by making clear what their bottom line is. They must be asked by a coalition of interested parties, how much is in the budget to get this done? That is what neighbors do, they talk to each other. Then and only then, can we move on from this habit of not worrying about the people downstream. No matter how many there are living there. This is a quality of life issue, centered on fairness.

Was it fair for New York State to allow ALCOA to be built where it ended up being built, upriver from an Indian reservation full of people that were not citizens?

There will not be another federal government GM bailout to allow local corporate interests to slip out the back door and escape the burden of environmental responsibility. This entire part of North America has been subjected to corporate environmental terrorism. Look at the statewide cancer rate comparisons. When the St. Lawrence Valley was previously known for industry in the historical fact books describing New York State, it is now known for illness and PCBs.

There are many ills affecting the North Country. I do not wish to add indifference to the effects of the pollution. The residents of Akwesasne, and others downriver, deserve better treatment than acquiescence to unknown variables. How many of them have employment with ALCOA? How many in Massena still currently do? North Country industry is no longer a backbone economic segment. That critical mass has been lost. A quick Grasse River fix will only serve to sever one more tie between Massena and Akwesasne, which is the real economic engine now. Do not be penny wise and pound foolish.

- Charles Kader
Turtle Clan
Enrolled member, St. Regis Mohawk Tribe



Project Manager for Remediation,
Ms. Young S. Chang.

Statement
For the Grasse River Clean-up.

While the United States governments view the Grasse River as just another clean-up that most be accomplished as quickly and efficiently as possible, I believe that they should know what this area means to the Mohawk People. Before the Seaway, the Grasse River was seen as a valuable area for the people of Akwesasne. Its beauty was enjoyed by children and grandmothers alike while providing sweet grass to our basket makers. As the grandmothers would pick sweet grass, the child would play on the grassy slopes and prepare picnics for the hard work grandmothers. Fishermen utilized the river for fishing and provide fish to the community, medicine people would pick medicines from the area to cure or heal the Mohawk People, the Grasse River area was seen as a pantry for the Mohawk People and we were grateful for the products it supplied to our people.

As the influence of the Non-Native people increased, they began to exclude us from the area. At first we believe that these exclusion were only temporary but as time went on it became more and more apparent that exclusions were forever. Industry and governments partnered to make the Grasse River a toxic dump where even the fish and turtles had a difficult time to live. The once beautiful area now was an industrial zone. The Mohawk people were overjoyed to hear that the area would be cleaned up just like our grannies would clean-up the dinner dish, spotless so they could be used again. The Grasse river is a family spot, a sacred spot and the animals, fishes, birds and plants that live there are our brothers and sisters and I hope that the current clean-up plan will as clean as the efforts of the grandmother to clean their home and house. Let's make the Grasse River spic and span clean.

Nov. 15 2012

Alma Kinsam

Former Mohawk Chief

*Statement of Objection
I want total clean up. Option #10*

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*Alma Ransom Farmer Chief
Nov 15/10*

Nov 15/12

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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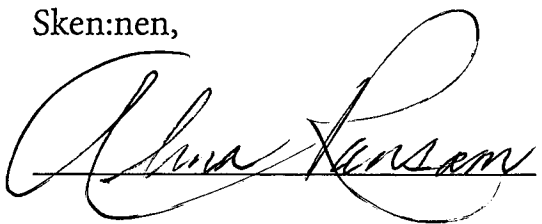
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As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit. For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for traditional Mohawk uses the toxins must be removed.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,



I am requesting a response letter:

Name (print): ALIMA RANSOM, Former Chief

Ad **U.S. FOIA Exemption 6 Redaction**

Cit **U.S. FOIA Exemption 6 Redaction**

Option 10

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

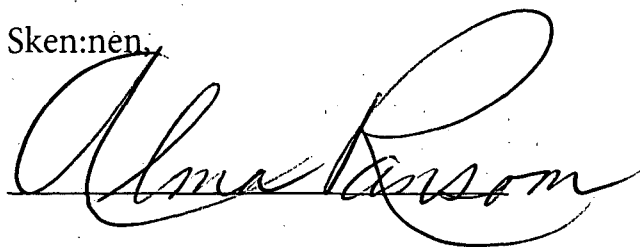
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Sken:nen.



I am requesting a response letter:

Name (print): ALMA RANSOM

U.S. FOIA Exemption 6 Redaction



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

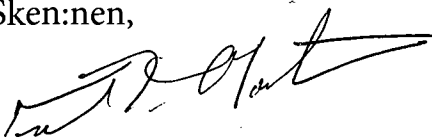
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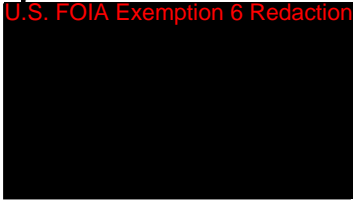
Name (print): *Victor L. Martin*

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

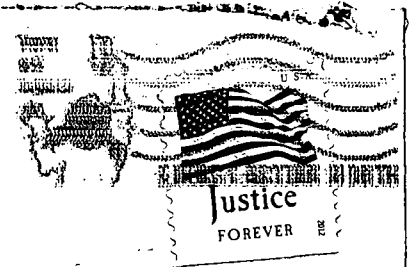
V. Martin

U.S. FOIA Exemption 6 Redaction



SYRACUSE NY 132

15 NOV 2012 PM 4 L



Young S. Chang, Remedial Project Mgr
U.S. Environ Protection Agency
290 Broadway, 20th Fl.,
N.Y., N.Y. 10007-1866

10007186698



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Dominic White

I am requesting a response letter:

Name (print): Dominic White

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

D. White

U.S. FOIA Exemption 6 Redaction

U.S. FOIA Exemption 6 Redaction

SYRACUSE NY 130

15 NOV 2012 PM 2 L



Young S Chang Redacted Pro. Man
US Environmental Protection Agency
290 Broadway 20th Floor
New York, NY 10007-1866

10007\$1823



Presentation for Proposed Remedial Action Plan for the Grasse River
SRMT Seniors Center
November 15, 2012

Whenever our People gather, our meetings are started and ended with the Thanksgiving address or the words that become before all else. This is how we see and understand the Natural world. It has a deliberate structure to it. It starts with the people and moves outward and upward from the earth to the waters to the plants and trees and medicines and the four legged animals to the bird life to the sky world and concludes with our creator who made all of creation to sustain life here on Mother earth.

The Thanksgiving Address reminds each person present that human beings are a small part of a much larger natural world. Its' structure is meant to address, give our respect, thanks and greetings to each part of the natural world separately. After each part, the speaker state " We who gather here bring our minds together as one for this purpose" and the assembled people acknowledge their agreement.

The Thanks giving Address reminds those gathered that they have duties and responsibilities, not only to themselves, but to the entire natural world and the rest of creation. The message is simple, that as each part of the natural world continues to fulfill its responsibilities, so we as humans have our own responsibility to fulfill to maintain the world as it should be.

The Haudenosaunee or the Six Nations Confederacy is among the most ancient continuous operating governments in the world. Long before the Europeans came to Turtle Island, our peoples met in Council to enact Principals of peaceful coexistence uninterrupted for future generations to follow. When the newcomers first came to Turtle Island, they found a land filled with bountiful gifts of our creator. A man could walk all day without seeing the sky, with its bountiful forest. The birds were so plentiful, that they darkened the sky during the day. The rivers were so thick with fish; you could not see the bottom. Whenever you could see the bottom, you could see the fish 25 feet below the surface, swimming on the bottom of the river.

Then the Europeans decide to leave our Council to form their own Union and this is where we started to see our environment start to change. We saw them go on a total path of destruction of our environment. The forests and the animals that inhabit them start to disappear. The rivers become full of sewage that the fish start to disappear. The land, the Great Lakes and its major tributaries are laced with toxins like PCBs, PAHs and Mercury, which brings us to why we are here today.

We are also here today, not only to speak for the future generations, but we are the voice for all of creation, from the tinniest insect, the animals, the fish, plants, the trees and the birds, all that are dependent on the waters to survive. The creator gave us the voice to speak for those that are not able to speak for themselves. Indigenous peoples all over the world follow the same law as the Haudenosaunee and that is the natural law. Nature has every right to exist just like the humans. We are to put their rights first, just like we do in the thanksgiving address, if we are to curtail environmental degradation in our communities, also in the process of slowing down global warming.

Our mother earth is tired and she is old. She is feeling as she can no longer support us. We, who walk about mother earth, occupy this land for a short time. It is our duty as human beings to preserve the life that is here for the future generations. In order to do this, we must join hands with the like minded people and create strength in unity as our creator has intended. Today, we ask EPA to join us in selecting

a remedy that will dig up the PCBs that has burdened our environment for so long and permanently treat them so the future generations will not have to deal with them.

Tanehtho(That is all). /

David Arquette

HETF Director

Via: PO Box 992

Hogansburg, NY 13655

518-358-4286

darquette@HETF.org

Hand DELIVERED

@ MEETING

NOV. 15, 2012.

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, NY 10007-1866

She:kon Young Chang

Since our community first detected contamination coming from the various industries upriver from our reservation, I have been actively involved in the efforts to clean up our rivers and land. As a member of the first environmental action group Mohawks Agree on Safe Health (MASH) I was involved in work to determine what contaminants were in our geographical area and the source of the contamination. We all knew that our community was going up against the wealthiest and most powerful industries in the land. GM at one time was #1 on the list.

As we organized further the Akwesasne Task Force on the Environment (ATFE) evolved and is comprised of representatives of the entire Akwesasne Territory – Mohawk Council of Akwesasne, St. Regis Mohawk Tribe and the Mohawk Nation Council of Chiefs and interested community members. Evidence began to unfold on the contaminants, their source and impact on animal, plant and human health. NYS Department of Environmental Conservation and US Environmental Protection Agency became involved as part of their fiduciary responsibility to Indians. Members of ATFE knew that we were in for the fight of our lives and many of us would grow old and possibly die before we saw any results of our work.

The evidence is there, the cleanup methods are there and we are still arguing about how much to clean-up and how. The wealthiest and most powerful industries continue to fight environmental clean-up efforts that people in Akwesasne want. We've seen NYS and USEPA fold under political pressure from these entities. You don't live here – we do. People from Massena don't live here or experience the level of contamination we do.

Our ancestors were trusting of the promises made by the state and federal governments to protect and promote our ability to live in peace and harmony with each other. As the USA rushed to secure lands in North America we were pushed, starved, massacred and relocated to the point of near extermination. What evolved in the land grab was the commitment of the US government to maintain a fiduciary responsibility for all tribes. To quote:

In her paper, American Indians and Social Policy, Dr. Priscilla Day stated, "The trust doctrine includes duties to manage natural resources for the benefit of tribes and individual Indian landowners, and the federal government has in some cases been held liable for damage caused by mismanagement" United States v. Mitchell 463 U.S. 206, 225 (1983)".

The Doctrine of trust responsibility is one of the most important concepts in Indian law-between 1787-1871 when the U.S. entered into hundreds of treaties with tribes, in almost all of these Indian tribes gave up land in exchange for promises by the U.S government. The Supreme Court has held that these exchanges created a trust relationship. The promises created a "duty of protection" toward Indians. "The Indians trust the U.S. to fulfill the promises which were given in exchange for land. The federal government's obligation to honor this trust responsibility and to fulfill its treaty commitments is known as its trust responsibility."

USEPA did not engage in this federal trust responsibility on behalf of the US government when the GM sites of contamination were under study. We asked for full removal of all contaminants from the site. GM wanted minimal clean-up and USEPA folded on this. We at Akwesasne will live with their decision to leave contaminants on site and "capped". The trust responsibility was broken.

USEPA did not engage in this federal trust responsibility on behalf of the US government when the Reynolds Aluminum sites of contamination were under study. We asked for full removal of all contaminants from the site. Reynolds Aluminum wanted minimal clean-up and USEPA folded on this. We at Akwesasne will live with their decision to leave contaminants on site and "capped". The trust responsibility was broken.

Now we have ALCOA. It is an opportunity for USEPA to now fulfill their trust responsibility. The Mohawks of Akwesasne have trouble trusting the U.S. to fulfill the promises which were given in exchange for land. The Mohawks of Akwesasne expect the federal government to honor its obligation to this trust responsibility and to fulfill its treaty commitments is known as its trust responsibility. ALCOA and GM can bear the costs of clean-up because after all, this is merely the "cost of doing business". There will be tax cuts and other financial compensations for this cost. ALCOA and GM will and can bear the financial brunt of their industrial actions. What will Akwesasne have? GM did not provide any financial compensation to the Mohawks of Akwesasne and fought any actions by our community to address the loss of our basic rights to hunt, fish, gather and plant food for our families that is not laden with contaminants. Now our people face new and life threatening illnesses that lawyers say cannot be directly linked to the specific contaminants existing in our environment. The burden of proof rests with us, people who do not have the financial resources to prove it.

We have treaties with the US government. These treaties don't "give" us "rights" they uphold our rights that we never relinquished - rights to govern ourselves, religious and cultural freedom, hunting, fishing and gathering rights, etc. These treaties also obligate the US and USEPA to fulfill their duty to protect us, the Mohawks of Akwesasne, our land, waters, animals, plants and air from industries that are attacking us.

EPA can accomplish this by not folding this time to political pressure and make ALCOA spend what it takes to remediate and restore the health of the Grasse River and the environment

surrounding it. My family – my children, my grandchildren and all of our future generations depend on you to fulfill your fiduciary responsibility. We are still here, our treaty rights still exist and your obligations are still there.

Sken:nen (In Peace)

Brenda LaFrance

Brenda LaFrance

U.S. FOIA Exemption 6 Redaction

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HAND DELIVERED

11/15/12.

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Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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Sken:nen,

I am requesting a response letter:

Name (print): JOHN LAZORE

Address: **U.S. FOIA Exemption 6 Redaction**
City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature:



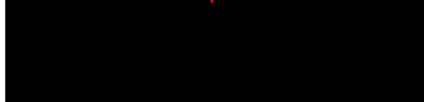
Date: 11/15/12

Print Name:

LAWENTIA NANTICOKE

Address:

U.S. FOIA Exemption 6 Redaction



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Signature:

Print Name:

Address:

Elizabeth Finnicke Date: *Nov 15, 2012*

ELIZABETH FINNICKE

U.S. FOIA Exemption 6 Redaction

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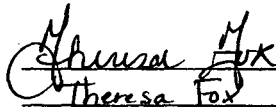
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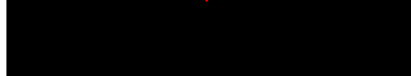
Print Name:

Address:


Theresa Fox

Date: 11-15-2012

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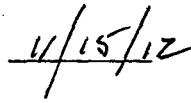
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Signature:

Katsitsionas Fox

Date:

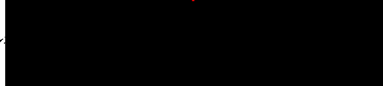
Nov 18 2012

Print Name:

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Sken:nen,

Signature: 

Date: Nov 15

Print Name: Joshua Sargent

Address: **U.S. FOIA Exemption 6 Redaction**



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Sken:nen,

Signature: *Danielle George* Date: 10/28/12
Print Name: Danielle George
Address: **U.S. FOIA Exemption 6 Redaction**

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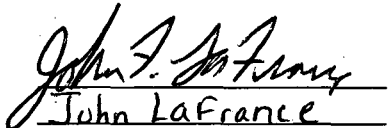
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Signature:




Date: 10/28/12

Print Name:

John LaFrance

Address:

U.S. FOIA Exemption 6 Redaction


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Sken:nen,

Signature:  Date: 11-15-12
Print Name: JAKE LAFRANCE
Address: **U.S. FOIA Exemption 6 Redaction**

ST. LAWRENCE RIVER VALLEY REDEVELOPMENT AGENCY

80 State Highway 310, Suite 6 ~ Canton, New York 13617
Phone: (315) 379-9349 / TDD: 711 ~ www.slrvra.com

November 15, 2012

Young S. Chang
Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

RE: Grasse River Remediation

Remedial Project Manager Chang:

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The St. Lawrence County Industrial Development Agency strongly urges the EPA to consider the \$243 million plan to provide clean up efforts to the Grasse River.

Sincerely,



Robert McNeil
Chairman

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To file a complaint of discrimination, write:

**USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington DC 20250-9410
or call (800) 795-3272 (voice) or (202) 720-6382 (TDD).**



St. Lawrence County Industrial Development Agency

80 State Highway 310, Suite 6 ~ Canton, New York 13617

Phone: (315) 379-9806 / TDD: 711 ~ Fax: (315) 386-2573 ~ www.slcida.com

MEMBERSHIP

November 15, 2012

CHAIRMAN

Brian W. Staples
Brian Staples, CPA

*

VICE CHAIRMAN

Ernest LaBaff
President Emeritus,
Aluminum Brick & Glass
Workers International Union

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SECRETARY

Lynn Blevins
Blevins Brothers, Inc.

*

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*

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St. Lawrence County
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*

R. Joseph Weekes, Jr.

Weekes Agency

*

CHIEF EXECUTIVE OFFICER

Patrick J. Kelly
St. Lawrence County
Industrial Development Agency

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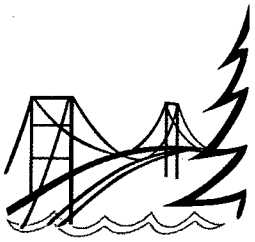
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**ST. LAWRENCE COUNTY
INDUSTRIAL DEVELOPMENT AGENCY
LOCAL DEVELOPMENT CORPORATION**

BRIAN W. STAPLES
CHAIRMAN

PATRICK J. KELLY
CHIEF EXECUTIVE OFFICER

November 15, 2012

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U.S. Environmental Protection Agency
290 Broadway, 20th Floor
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Vice-Chairman

80 STATE HIGHWAY 310, SUITE 6
CANTON, NEW YORK 13617-1496

WWW.SLCIDA.COM

VOICE: (315) 379-9806 / TDD: 711
FAX: (315) 386-2573



Grasse River Remediation

Sweatland, Natalie

to:

Young Chang

11/15/2012 04:16 PM

Cc:

"Kelly, Patrick"

Hide Details

From: "Sweatland, Natalie" <NSweatland@co.st-lawrence.ny.us>

To: Young Chang/R2/USEPA/US@EPA

Cc: "Kelly, Patrick" <PKelly@co.st-lawrence.ny.us>

3 Attachments



2012-1115_Staples_Grasse River Cleanup_Support.pdf



2012-1115_LaBaff_Grasse River Cleanup_Support.pdf



2012-1115_McNeil_GrasseRiverCleanup_Support.pdf

Please submit the attached documents as part of the public's comment for the Grasse River remediation project.

Originals will be mailed Friday, November 16.

Please feel free to contact this office if you have any questions or concerns.

Regards,

Natalie Sweatland

Natalie Sweatland

St. Lawrence County Industrial Development Agency

80 State Highway 310, Suite 6

Canton, New York 13617

Phone: (315) 379-9806 ext 3330

Fax: (315) 386-2573

Email: nsweatland@slcida.com



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ST. LAWRENCE RIVER VALLEY REDEVELOPMENT AGENCY

80 State Highway 310, Suite 6 ~ Canton, New York 13617
Phone: (315) 379-9349 / TDD: 711 ~ www.slrva.com

November 15, 2012

Young S. Chang
Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

RE: Grasse River Remediation

Remedial Project Manager Chang:

The St. Lawrence County Industrial Development Agency wishes to convey support for the United States Environmental Protection Agency's Proposed Remedial Action Plan ("PRAP"), released October 1, 2012, to remediate the Grasse River.

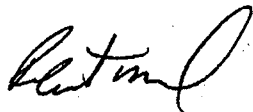
The PRAP, which calls for the dredging of some near-shore sediments, capping in the main channel and armored capping in ice scour-prone section of the river, is both responsible and cost-effective, and it will also protect human health and the environment.

Many years of scientific study show a capping remedy is protective of human health and the environment, effective over the long term, and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also a reasonable approach.

Alcoa is the largest employer in our region, and its presence is key to our economic well-being. After nearly two decades of expert study and stakeholder input, we feel that this process must move forward.

The St. Lawrence County Industrial Development Agency strongly urges the EPA to consider the \$243 million plan to provide clean up efforts to the Grasse River.

Sincerely,



Robert McNeil
Chairman

This institution is an equal opportunity provider and employer.

To file a complaint of discrimination, write: USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD).

11/15/2012

Richard E. Towne

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007

Dear Ms. Chang,

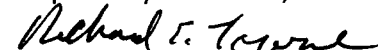
Please move forward with your plan to remediate the Grasse River in St. Lawrence County.

I understand there has been considerable work done to evaluate the best method of cleaning up the river and the solution you have arrived at seems reasonable. I am in favor of the process moving forward immediately rather than spending years or decades more refining the plan. I am not an Environmental Engineer but have some experience with other remediation projects and am well aware that it would be very difficult if not impossible to engineer the perfect solution.

I am 100% against dredging the river bed because I fear more environmental damage than has already occurred. Sediment and whatever else lies on the river bed should not be stirred up which would be devastating to fish and other river dwellers.

Another point to consider is that this solution does not have to be the final effort. If in the future, evidence shows levels of contamination that warrant remediation, address those areas as needed.

Respectfully submitted,


Richard E. Towne



Grasse River Project - Public Comment Letter
Raymo, Lori L. to: Young Chang

11/15/2012 08:18 AM

From: "Raymo, Lori L." <Lori.Raymo@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

1 attachment



Grasse River Comment Letter.pdf

Lori Raymo

U.S. FOIA Exemption 6 Redaction

November 15, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
New York, NY 10007-1866

Dear Ms. Chang,

I attended your Grasse River informational meeting on Wednesday, November 14, 2012, held at Massena Central High School. After listening to your presentation, I am convinced that your recommended proposal, option 6, is the wisest choice. I am a life time resident of Massena and a 30 year Alcoa employee. I recognize the importance of cleaning up the Grasse River for the health of all who live in the vicinity of the river and for future generations. I also know how important Alcoa is to our local economy and the future of Massena and the surrounding areas. After 20 years of study, science supports your proposal. I urge you to act quickly. It is times to move forward and get this done.

Sincerely,



Lori Raymo

Ronald Morrow

U.S. FOIA Exemption 6 Redaction

November 15, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Sir:

I am a retired Alcoa and a native of Northern New York. I hunt, fish, ski, bike and otherwise thoroughly enjoy the Adirondacks and the St. Lawrence River Valley. I live close to the Grasse River and use it for kayaking in the summer and cross country skiing in the winter. I am a Clarkson grad and New York licensed Professional Engineer.

My company has been very sincere and conscientious in its dealing with environmental issues at Massena Operations for the last 25 years. In that time, Alcoa has worked closely with the NYDEC and EPA to complete a multitude of projects to cleanup past discharges and to improve plant processes to drastically reduce air, water and other present day discharges from the plant. This has been very time consuming and expensive, but it was the right thing to do as a good corporate citizen. Reducing waste also had a positive effect on the bottom line.

Alcoa has now worked closely with various governmental agencies to test, study, design and propose multiple options to remediate the Grasse River. The EPA has chosen one of these options that is feasible and reasonable. No option can remove all PCBs from the river bottom, however, they have already been covered naturally by sediments and the proposed capping keeps them in place. Extensive dredging will re-entrain the hazardous materials in the water and expose fish and other wildlife to them.

The PRAP is doable and supported by science and field testing. A more extensive solution does not improve the final outcome. Let's get on with it. Alcoa deserves to know its future liabilities.

Sincerely,



Ronald Morrow



Grasse River Remediation
Ronald & Miriam Morrow

to:

Young Chang

11/15/2012 10:57 AM

Hide Details

From: "Ronald & Miriam Morrow" <[redacted]>

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



Grasse river epa letter.docx

Attached is my letter of support for the proposed remediation plan. I have also sent a signed hardcopy to you by mail.

Thank you for your consideration.

Ron Morrow

Ronald Morrow

U.S. FOIA Exemption 6 Redaction

November 15, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Sir:

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Sincerely,

Ronald Morrow



Grasse River Feedback
Rombough, Steve M. to: Young Chang

11/16/2012 06:22 AM

From: "Rombough, Steve M." <Steve.Rombough@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Good morning Ms. Chang,

I have already submitted my comments to you; however, I feel compelled to follow up that initial letter with another one after sitting in both Town Hall meetings on the proposed EPA remediation plan for the Grasse River. My name again is Steve Rombough and I'm the manufacturing manager for Alcoa here in Massena. I spoke Wednesday evening in Massena on behalf of Alcoa. I was also born and raised in Massena and have spent approximately 35 years of my 47 residing here in Massena.

I was struck by the distinct difference in the two evenings. The Massena Town Hall session for the most part, focused on the data, the science, the experience EPA has in these matters, the long history of sequential Alcoa funded trials on the river to take prior learnings and develop new designed experiments.....most feedback was rooted in your science driven proposal and discussion linked to the elements of the 9-step process EPA uses to come to a recommended solution.

Last evening I heard very little if any science based, data driven argument against Option #6, on the contrary what I did hear was that Option 10, although summarized by your presentation as not being technologically feasible given the river bottom topography, should be carried out. The theme as I heard it was that Alcoa (with GM and Reynolds) put the PCBs in the river and therefore must remove them. Regardless of feasibility and effectiveness, length of time to accomplish the task or project cost, dredge the entire river. To be fair, a speaker or two did opt for the broader dredging option w/capping but your summary presentation also does not support that option. The evening focused on health care issues that IF, and I stress IF, a correlation exists with the river condition, the Akwesasne Tribe seeks an option that carries a punitive element to it.....if not technologically supported, why a \$1.2B solution when the science supports Option 6? If it's based on a principle of returning Mother Earth to its former state, that objective is not feasible with the technological and river bottom limitations nor is that a tenant in the 9-step EPA decision making process.

Again, I'd strongly urge you to continue on the path of letting science, trial data and EPA's long history of doing these projects guide the decision towards correct remedial option #6 for the Grasse River clean-up.

Thank you again for your time, you did an excellent job summarizing the project both evenings,

Steve Rombough

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Miss Chang,

My wife and I write today, to express concern over the proposed Grasse River clean-up. We are property owners on the Grasse River, slightly east of the 131 bridge. It is apparent that natural movement of sediments and stopping the flow of PCB's into the river, has made dramatic strides in improving water quality.

We are, however, concerned that near shore dredging will re-suspend PCB's, and degrade water quality. While this is a less expensive solution for Alcoa, it may be a more beneficial solution for the environment.

We hope that EPA's decision to do this near shore dredging is based upon sound science and the good of residents like us who live on the water instead of calming political waters.



Steven and Chantal O'Shaughnessy

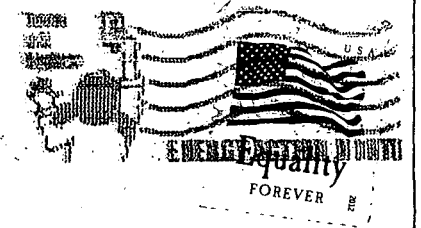
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 **S & C O'Shaughnessy**
U.S. FOIA Exemption 6 Redaction

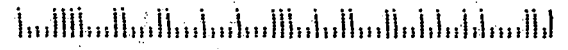
SYRACUSE NY 133

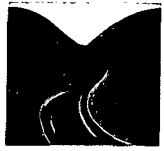
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MS Y, S. CASARE
REMEDIAL PROJECT MGR
US EPA
290 BROADWAY, 20TH FLOOR
NY, NY 10007-1866

10007186699





Massena Memorial Hospital

Quality Healthcare in the Seaway Valley

November 16, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Re: Grasse River Remediation Project

Dear Mr. Chang,

I write to express my strong support for Alternative Six and the critically important remediation of the Grasse River.

The proposed capping remedy is a protective solution ensuring the long term safety of the environment and our corresponding human element and complements the natural recovery already occurring in the river. While some recommendations contained in PRAP go beyond capping, I urge the EPA to move forward with Alternative Six.

The clean-up of the Grasse River has been studied for over two decades and has involved input and comment from numerous local, state and federal agencies. We believe it is now time to move forward.

As Chief Executive Officer of Massena Memorial Hospital, I can attest to the importance of the Grasse River and Alcoa's presence in our community. Alcoa is the largest private employer in the North County and a major supporter of the region's non-profit and civic organizations. The entire region relies on the jobs and goodwill provided by this vital corporate citizen. I have no doubts that if Alcoa was to ever leave Massena, the hospital would close and severe economic damage would be cast on those left in the community.

Massena deserves a clean Grasse River and Alcoa needs a cost effective remedial plan that protects the health of our residents and their environment. Alternative Six achieves both.

I strongly urge you to allow Alcoa to move forward with Alternative Six and the remediation of the Grasse River.

Sincerely,

Charles F. Fahd; II, FACHE
Chief Executive Officer

Brasher Falls Family Health Center
Dialysis Center
Kids Korner Pediatric Center
Levine Outpatient Center
Louisville Family Health Center
Norfolk Family Health Center
North Country Veterans Clinic
Surgical Group and Wound Care



Support for EPA PRAP - Grasse River - Massena, NY

Mary Ellen O'Connell

to:

Young Chang

11/16/2012 03:56 PM

Hide Details

From: Mary Ellen O'Connell <moconnell@wlsv.org>

To: Young Chang/R2/USEPA/US@EPA

To:

Young S. Chang, Remedial Project Manager U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

I am writing to inform you that I am in support of the Proposed Remedial Action Plan for the Grasse River and urge you to issue a Record of Decision based upon the PRAP without modification, as soon as practical. My parents currently live along the Grasse River and utilize it for recreational activities and enjoy its beauty year round.

My Father, and Grandfather worked for Alcoa for their entire careers and my Brother is currently an Alcoa employee. I can't imagine the economic devastation that would occur in Massena and the northern New York region if Alcoa were forced to leave.

I am a public school principal in a rural community located along the Genesee River in western New York and know first-hand that Rivers are the lifeblood of communities. However, in these economic times I implore you to act responsibly by supporting the PRAP to ensure that our family and families in future generations can continue to utilize and enjoy the Grasse River and to ensure that Alcoa remain an economic force for in northern New York.

Thank you for your time and attention in this most important matter.

Mary Ellen O'Connell
Wellsville Middle School Principal
126 West State Street
Wellsville, NY 14895
585-596-2143
mo'connell@wlsv.org

11/19/2012

Megan E. Smith

U.S. FOIA Exemption 6 Redaction

November 17, 2012

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

I, Megan E. Smith, am writing to express support for a Grasse River cleanup plan that is rooted in science.

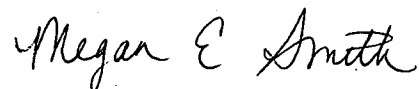
Fifteen years of scientific study have determined that a capping remedy is protective of human health and the environment, effective over the long term, and complements the natural recovery already occurring in the river. The alternative recommended by the EPA is also a reasonable approach.

I strongly encourage the process to move forward after nearly two decades of expert study and input from many people, so that the community can begin reaping the benefits of the remediation.

I recognize the importance of the Grasse River and Alcoa's presence in the community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,000 hardworking men and women and supports many community organizations. I am one of those employees.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely,



Megan E. Smith
St. Lawrence County Citizen

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River.

The proposed remedy is not protective nor is it a permanent remedy. As a Mohawk, I have a responsibility to consider the effects of any actions taken for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for generations. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantation and harvesting resources in and along the Grasse River.

The proposed dredging and restoration of the near shore areas is an acceptable and appropriate measure for the Grasse River.

For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient for protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for Mohawk uses all toxins must be removed.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Signature:

Jade Gabri

Date:

11/18/2012

Print Name:

Jade Gabri

Address:

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Signature: Leanne King Date: 11/18/2012
Print Name: Leanne King
Address: **U.S. FOIA Exemption 6 Redaction**

J.S. FOIA Exemption 6 Redaction

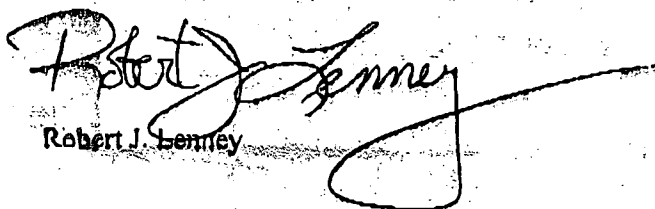

November 19, 2012

Young S. Chang,
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

As a long time resident of Northern New York, I speak for many in our community when I say that it is time for EPA to make a science based decision on the appropriate remedy for the Grasse River. While I respect EPA's selection of Alternative 6, 20 years of studies and pilot remediation projects have shown that a capping remedy is just as protective of human health and the environment. Therefore, it is my opinion that EPA should select Alternative 3 which would be a more efficient use of Alcoa's funds.

Respectfully,


Robert J. Lemney

Massena, NY 13662

Young S. Chang
Remedial Project Manager
US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

November 19, 2012

Ms. Chang,

This note is to reinforce with one more positive comment, the remediation of the Grasse River. Thank you for your efforts in coming to a decision on the choice of a plan. I feel you have chosen the best option for this area and hope that things are finalized soon. The next steps should be taken as quickly as possible so as to issue the record of decision and implement the proposed remediation.

Thank you again for your diligence,



Gail Schneider
Member of the Town Board of Louisville
New member of the advisory committee



Grasse River Cleanup Public Comment Meeting at Massena High School
Murphy, Bryan K. to: Young Chang

11/19/2012 11:49 AM

From: "Murphy, Bryan K." <Bryan.Murphy@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Young,

Thank you for your and your colleagues time and effort to present the EPA's recommendation for the cleanup of the Grasse River. I attended the meeting at Massena High School with my 10 year old son but wasn't able to stay to comment in person as it was getting late.

A little background about myself: I am the third generation of my family to work for Alcoa Massena. My great grandfather was a mechanic, my grandfather was an accountant, my father went to West Point and served as a career Army Officer. I served in the military myself but came to Massena after the service, went to College in Potsdam at Clarkson University was offered a job as an engineer and I've now worked for Alcoa 21 years. If my own son wished to work for Alcoa someday, I would be honored that he is carrying the tradition.

I enjoyed your presentation. To be quite honest, from an earlier presentation that I attended, I saw that the capping only option resulted in a quicker reduction in PCB levels in the fish species which made me wonder why another more expensive option was being chosen by the EPA if it would take longer to achieve reduced PCB levels. After hearing your explanation of dredging and then backfilling the near shore banks with fresh soil to help restore the habitat of the fish species, it made perfect sense and I am sure would help the fish and wild life populations in the future.

It is my understanding that Alcoa supports the EPA's recommended option as the best solution to returning the Grasse River to a restored ecologically fish and wild life 'friendly' state and is ready to invest in the effort.

Please continue to push for a quick decision so that our community and Alcoa can move this process forward and make the northern NY a viable place to live, work and enjoy what nature has to offer us here.

Sincerely,

Bryan Murphy
Staff Power Engineer
Alcoa Massena NY

Tel. 315 764-4421
Cel. 315 705-5000
Bryan.murphy@alcoa.com

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Sken:kon Young Chang,

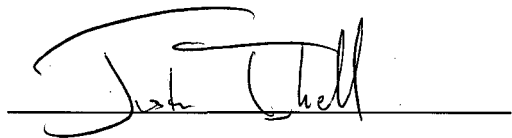
This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River. The proposed remedy is not a protective remedy nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

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It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,


Justin Tarbell

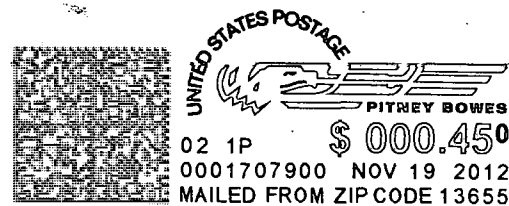
I am requesting a response letter:

Name (print): Justin Tarbell

Add **U.S. FOIA Exemption 6 Redaction**
City

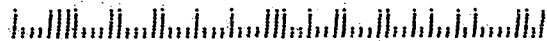
U.S. FOIA Exemption 6 Redaction

Akwesasne, NY 13655



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

10007186699



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



I am requesting a response letter:

Name (print): NOAH POINT

Address: U.S. FOIA Exemption 6 Redaction

City: [Redacted]



HAUDENOSAUNEE

Mohawk • Oneida • Onondaga • Cayuga • Seneca • Tuscarora

ENVIRONMENTAL TASK FORCE

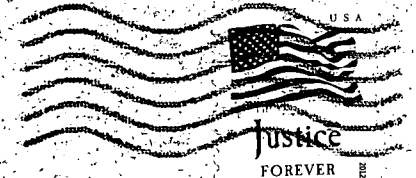
Akwasasné Mohawk Territory

Via Box 366

Rooseveltown, NY 13683

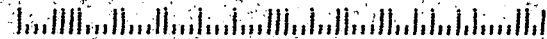
SYRACUSE NY 130

19 NOV 2012 PM 2 L



Young S. Chang
Remedial Project Manager
U.S.E.P.A.
290 Broadway, 20th Floor
New York, NY
10007-1866

10007186699



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River. The proposed remedy is not a protective remedy nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit. For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for traditional Mohawk uses the toxins must be removed.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Cecelia King

If you would like a response letter, please fill out the following information:

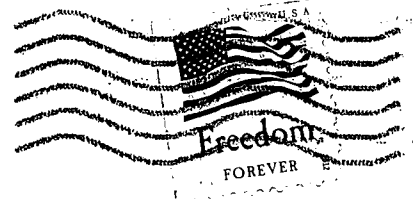
Name (print): Cecelia King

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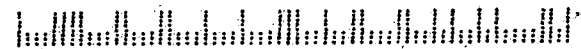
PLATTSBURGH NY 129

20 NOV 2012 PM 1 T



Young S. Chang, Remedial Project Manager
US Environmental Protection Agency
290 Broadway, 20th floor
New York, NY 10007-1866

1000731866



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

Dear Young Chang,

I, Josephine Swamp (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Josephine Swamp

Fill out the information below if you wish to receive a reply notice.

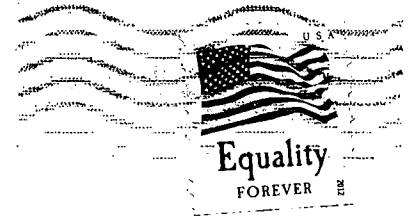
(Name) Josephine Swamp

(Address) **U.S. FOIA Exemption 6 Redaction**

(City) **U.S. FOIA Exemption 6 Redaction**

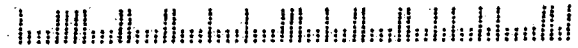
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20 NOV 2017 PM 1 1



Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th floor
New York, NY 10007-1866.

1000731866



(Name) SHIRLEY OAKES

U.S. FOIA Exemption 6 Redaction

(C)

Ms. Young Chang, Remedial Project Manager

U.S. Environmental Protection Agency

290 Broadway, 20th Floor

New York, NY 10007-1866

Dear Young Chang,

I, Shirley Ann Oakes (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Shirley Ann Oakes

(Name) Dawn Lazere

U.S. FOIA Exemption 6 Redaction

(City)

Ms. Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young Chang,

I, Dawn Lazere (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

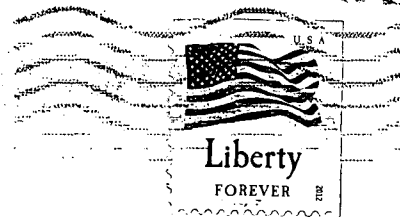
In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Dawn Lazere

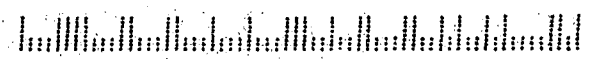
PLATTSBURGH NY 125

20 NOV 2012 PM 3:1



Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th floor
New York, NY 10007-1866

1000731866



November 20, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang

I was unable to attend the Meetings in Massena this month, however I do want to give my input and opinion on the decision on the remediation of the Grasse River.

I am a big proponent of the dam to be able to do limited hot spot dredging and keep scour to a minimum. This is ideal in that it would also support sustainable energy and perhaps help Massena's economic recovery.

Understanding that you omitted to put this out as an option I believe the best option put forth by EPA is Alternative 5. This includes hot spot dredging in areas where it can be successfully completed and capping in areas where capping is more feasible.

As a member of the Massena Remedial Advisory Committee for the St. Lawrence Area of Concern our charge is to advise NYSDEC on plans to restore beneficial uses to the Area of Concern. With the ALCOA record of decision some data for BUIs (Beneficial Use Indicators) can be gathered that will provide documentation of the status of the indicators and some of the 5 year reviews may provide additional information on BUI recovery. If this can be incorporated in the ROD at minimal expense I would like to see that included.

If more information is required for clarification please contact me at

Sincerely,

Douglas C. Premo

Douglas C. Premo, CHMM

Young Chang
Remedial Project Manager
US EPA
290 Broadway - 20th Floor
New York, NY 10007-1866

Project Manager Chang,

My husband and I write today to express our support for the proposed cleanup plan of the Grasse River. We own property adjacent to the river and regularly enjoy the rivers recreational opportunities.

We considered multiple factors while reaching our decision:

The contentiousness this has caused in our region.

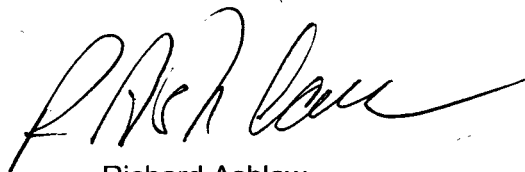
The adverse impacts caused by the dredging pilot project in the mid 2000's.

The need for our community to move on.

It seems evident to us that it is indeed time to move on. The EPA recommendation is a reasonable plan that will be accepted by a reasonable community.

Sincerely,

Cathy Ashlaw

A handwritten signature in black ink, appearing to read "Richard Ashlaw", written in a cursive style.

Richard Ashlaw



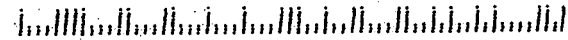
Dick Ashlaw
U.S. FOIA Exemption 6 Redaction

SYRACUSE NY 138
20 NOV 2012 PM 5 L



YOUNG CHANG
REMEDIAL PROJECT MANAGER
US EPA
290 BROADWAY - 20TH FLOOR
NEW YORK, NY 10007-1866

1000781866



(Name) John Gabri

U.S. FOIA Exemption 6 Redaction

(City)

Ms. Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

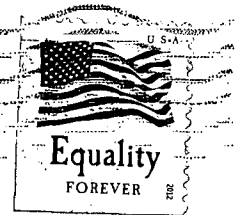
Dear Young Chang,

I, John Gabri (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

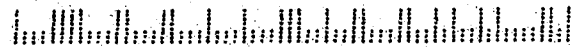
Sincerely,

John Gabri



Young S. Chang, Remedial Project Manager
US EPA
290 Broadway, 20th floor
New York, NY 10007-1866

1000731866



Tsionkie Cook
October 24, 2012

To the U.S. environmental agency:

Hello my name is takatsitsionkie cook I am a senior in Salmon River High School. I am a traditional Mohawk who resides in Akwesasne I live in Tsi Syne. I am currently in native studies in the past week I have heard about the Grasse River. We have had three presenters who discussed about the Grasse River and how it has been polluted with PCB's. One of the presenters had told me she once found a turtle that was considered toxic.

It is because of this matter I am writing to you to help save the Grasse river from PCB's. The river is so polluted with PCB's that we cannot eat fish like we used to. Our people once depended on the fish for food and now we cannot have more than one meal because the PCB's can cause cancer to many of us. Armor capping may fix a small part of the river but I won't fix the whole river. I suggest that the river should be cleaned and fixed back to the way it used to be in a safe and efficient way that would not harm us the people and also the animals that depend on the river for water. The small armor cap will not fix anything the company responsible for the pollutants should be held responsible to clean the whole river. It is their fault that we cannot eat fish anymore.

As a student of Salmon River and a member of the Akwesasne Mohawk nation I am asking you for your help to enforce that the company responsible for the river to clean up their mess. Nia:wen kowa for your time

Sincerely Takatsitsionkie Cook

Takatsitsionkie Cook

October 25, 2012

Dear United States Environmental Protection Agency,

My name is Kobi Johnson, I am currently a senior at Salmon River Central. I live in Akwesasne. We had presenters here at our school from the St. Regis Mohawk Tribe talking about the issues with the Grasse River and the solutions to try and fix it.

You're solution was to only clean up a little bit of the PCBs and leave the rest and flow down into the St. Lawrence. I believe you should clean up all of the Grasse River not just a small section. You should clean up all of the river because the waters around here are polluted enough and it would be a lot better if we have some clean water around here. Some of the problems are the PCBs. A lot of people do not eat fish because of the PCBs and the recommended amount is to only eat fish once a month. With the waters clean people would eat a lot more fish from the water. We cannot drink the water like my grandparents could or see to the bottom because the water is that polluted. There is a right way to do this and a wrong way and myself, along with thousands of other people believe your way is not the right way.

Please have consideration and make the right choice. People around here would like to have the waters back to the way they were. Please take this letter into deep consideration.

Kobi Johnson

A handwritten signature in cursive script that reads "Kobi Johnson". The signature is written in black ink and is positioned below the typed name.

October 25, 2012

Dear USEPA,

My name is Valerie Jackson and I'm from Akwesasne. I'm writing a letter relating to the pollution in the Grass Rivers from Alcoa and what's being done. And also what I think should be done.

Since 1903 Alcoa has been operating an aluminum manufactured facility. They have dumped their hazardous waste onto the property and into the Grass Rivers. The rivers were contaminated 7 miles down from where they have been dumped. From the pollution of PCB's dumped into the rivers and grass rivers; it has caused problems in Akwesasne. Our fish we catch are becoming unsafe to eat due to all the PCB'S; the waters we swim in are becoming too contaminated, leaving us unsafe to swim in, in the summer.

There was a presenter that had come into my native studies class that informed us on the dangers. We were informed on how the caps that were used to 'contain' the polluted waters and how they break down over time, causing the pollution to spread throughout Massena Rivers and into the St. Lawrence. What Alcoa was agreeing to do was clean up only a part of the contaminated waters and not all of it because it cost too much.

In my opinion, I think they should put all the money needed to clean up all of the waste. They started the pollution, there's no reason why they shouldn't take full responsibility and do what needs to be done. Cleaning it out now will greatly help the waters to become much more clean over the years. Avoiding the problem and pretending it's not there will only come back on them worse in the future. The new generations coming up should be able to use their rivers and do as they like without having to worry about all the PCB'S.

Alcoa needs to do more than what they're willing to do to help clean up their mess. The waters need to be cleaner. We should be able to use our waters without worrying about it being contaminated. Akwesasne is a community full of people that would like to see a change in our waters, including me.

Sincerely yours,


Valerie Jackson

Dear USEPA

October 25, 2012

She:kon skennakowa my name is Tsiotenhariio Herne I am the daughter of Louise and Vince Herne. I live in the Akwesasne Mohawk territory. I go to Salmon River Central school and am in 10th grade taking native studies with Katsitsionni Fox.

We had a presenter come in and talk to us about the environmental problem about the P.C.B's issue in the grass river. The issue was that USEPA was only recommending the capping of a little part of the pollution of the P.C.B's in the grass river instead of cleaning up all the P.C.B's that's going down the river into the St. Lawrence. These P.C.B's cause a lot of problems with our fish.

I think that the Alcoa should clean up all the P.C.B's in the grass river and in the St. Lawrence because it is causing a lot of problems. We cant eat the fish or drink our water like we used to.

I am every concerned about this issue. I would like to see them clean up the mess with the money they got from what they did to our waters because you people didn't have the right to pollute our waters like that. We sometimes can't even swim in the river because it gets so bad. We want our nice clean rivers back please and thank you.

Nia:wen for your understanding.

Tsiotenhariio Herne

Cory Garrow
October 25, 2012

Dear US Environmental Protection Agency,

My name is Cory Garrow and I am a senior at Salmon River High School. I live in Akwesasne and am writing because I have read about the issue in Grasse River, how it has been contaminated by Alcoa. The plan I read about is to only clean up some of the problems they have made. I also had a speaker from the St. Regis Mohawk Tribe who told us about the issues at Grasse River and how it will affect people in and around Akwesasne in the future if nothing is done.

I think that they should take responsibility in what they have done and clean up all of the mess they made. If they don't clean up all of it then it could really have an effect on future generations in Akwesasne I feel they should clean all of it up because it will help for now but still wont be back to the way they found it before they contaminated it. If they decide to clean up just some of it will not only still affect us today, and really have an impact on the future generations from now.

Especially in my community, people are so used to catching fish and eating them and we wont be able to do that if it is not all cleaned up at Grasse River. We are used to just going out and swimming all day in the river wherever we want and we will have to be pushed into one area where it is not as contaminated or can only swim for an hour or so. In order to save the traditions of Akwesasne and the people who live here would be to dig up all of the contaminated soil, not just some of it like they are trying to do.

Please consider what I am trying to say and clean up all of Grasse River so all the people who depend use the river and depend on it, like my community can go back to how it used to be. Do the right thing and put it back the way you found it.

Cory Garrow

A handwritten signature in black ink, appearing to read 'Cory Garrow', written in a cursive style.

To: US Environmental Protection Agency
October 25, 2012

She:kon, my name is Morgan Thompson, I'm a Sophomore in high school at Salmon River Senior high school. I live on Cornwall Island.

I have read about the pollution of the grass river. I believe that ALL of the Grass River should be cleaned through dredging and returned to how it used to be generations ago. I know people probably aren't going to want to do this because of how much money it will cost. But all of the Grasse River should be cleaned because it will affect our children and our children's children. It is not fair to the animals or the people that their habit is being poisoned. This problem is not going to fix itself, the company ALCOA who has polluted it must be their duty to clean it up. We have enough poisoned rivers in this community. ALCOA should also pay for all of the dredging to the Grasse River for it is their fault and their mess. We need our natural clean waters back to the way they were for the generations to come. Nia:wen

Sincerely,

Morgan Thompson

A handwritten signature in black ink that reads "Morgan Thompson". The signature is written in a cursive style with a large, sweeping initial "M".

Aaron Francis
10/24/12

To the U.S Environmental Agency:

Hello my name is Aaron Francis. I live here in Akwesasne Mohawk Nation Territory. I am a senior at Salmon River Central High School and I've also attended at the Akwesasne Freedom School.

While I was in my native study class here at Salmon, I received information about what has been happening with the clean up at Grasse River with Alcoa. Grasse River has been polluted with PCBs and we can no longer enjoy eating our fish or swim in that area and I am concerned that Alcoa is only going to do very little clean up in that area because they plan on to only remedy the area and create a temporary blockade of PCBs in the area. A presenter came here into my studies class and talked to us about what is wrong with this proposal and I agreed that this temporary or "Armor cap" is going to only last for a few years or less and Alcoa is doing little investment in cleaning up the PCBs that they have created from their industrial factory and my opinion is that since Alcoa has made a mess in my community I think Alcoa should clean it up their mess of PCBs entirely.

I am here writing to your Agency requesting for your help in regarding the PCBs and the involvement of Alcoa. The PCB contamination is being dealt with very poorly by Alcoa and is in dire need of assistance from a more informal power of the whole matter of PCBs and the clean up process. Alcoa is not only affecting the Grasse River but is also effecting the environment on a huge scale where my community is. Your assistance with the clean up of Grasse River will be greatly appreciated by me and the Akwesasne community of the Mohawk Nation. By stepping in, and ensuring that Alcoa cleans up the PCBs properly, we can ensure a brighter future for our children and children's children for what we do here today will affect us tomorrow.

As a student at Salmon River and a resident here in Akwesasne, the PCB contamination is effecting my community and request your Agency to step in and be the bigger brother to Alcoa and show them what they are planning to do to remedy the Grasse River won't help clean but only contain the PCBs. Alcoa should be shown how to properly clean up their mess and be prepped for clean up.

Sincerely Aaron Francis.

A handwritten signature in black ink, appearing to read "Aaron Francis". The signature is written in a cursive, somewhat stylized script.

Elijah Benedict

10/25/12

Dear US Environmental Protection Agency

This letter is being sent to the US Environmental Protection Agency organization to bring up the subject of the cleanup of the Grasse River in Akwesasne. I am a senior at Salmon River Central School and I am well aware of this issue and would like to have a small say in what the US Environmental Protection Agency should do to help clean up the river.

I myself think Alcoa should take full responsibility and should clean up the whole river and not just a small section of the river. It may be expensive I understand, however you're the USEPA, You should make Alcoa pay for the damages they have caused to our river. If they still refuse, you should have the whole community work together to clean up the river manually. It will take a while I'm sure, but I am a firm believer in it may be a long road but it's worth it in the end.

Which if it all goes down the way I hope it will, future generations in Akwesasne will have a place to swim without having to worry about the dangers of getting diseases. With all the pollution in the Grasse River, people in Akwesasne cannot eat fish as much as we used to because of the dangerous chemicals that are in them. It may be a while down the road but I strongly believe if all goes well, it will have been worth every penny in future generations.

US Environmental Protection Agency, I strongly suggest you take my advice on what to do and make Alcoa clean up the river. It would be a great way to bond with our community like we used to. Plus future generations will have clean water where they could swim and not have to worry about diseases. As well as be able to eat the fish from the river without the worry of PCB's. I hope you take this idea into consideration and good luck with the clean up.

Elijah
Benedict

October 25, 2012

To the USEPA,

Hello my name is Kahiio Cree I am a tenth grader in Salmon River school from Akwesane and I have read a lot about the proposed grasse river remediation. we had guest speakers come into our Mohawk studies class to talk to us about the proposed clean up for the grasse river that runs into the St Lawrence. I think that the proposed dredging and capping solution is inadequate for our needs because Alcoa and gm is held responsible for the pollution and if they didn't want to pay to clean it up the right way then they shouldn't have polluted it in the first place.

The damage to our river is so much that the water will never be the same as it was twenty, thirty years ago. Now because of them we will never be able to live of off the fish supply in the St Lawrence without the risk of birth defects and cancer. Some of our oldest animals have picked up so much toxins that there are considered toxic waste like a turtle found in the St Lawrence near Gm and Alcoa. They should be made to clean it up the right way so that our rivers will be cleaner for future generations

The proposed plan calls for minimum dredging along the shore and start of the river and amour capping in the middle of the rest of the length of the river this plan should be dismissed due to amour capping high possibility of failure. I think that Alcoa and gm should be made to clean the whole length of the river because it is there fault that our river is polluted. Forty years ago before GM and Alcoa started dumping chemicals in the St Lawrence the elders said that you could see 25 to 35 feet down now your lucky if you can see ten in some parts. So please for the sake of future generations clean the river the right way

Sincerely

A large, stylized handwritten signature in black ink, likely belonging to Kahiio Cree, written across the bottom of the page.

10/24/12

To the USEPA:


My name is Jackie Benedict, I'm 17 years old and currently a senior at Salmon River Central School. I'm also a member of Ahkwesashne.

The USEPA Grasse River Superfund Site has become a growing concern to my community and I. Alcoa has not only affected the Grasse River, but the St. Lawrence River as well, and as far as I know they only want to take responsibility for the water surrounding Alcoa. I feel that they should clean all of the water that has been affected by Alcoa, if it wasn't for them we wouldn't have most pollutants we have in our river today.

Here in my community the river is an important resource and is something we greatly respect and care for, after-all it has been here as long as our ancestors and it would be awesome if future generations could have a cleaner and safer river.

Therefore, I strongly believe that Alcoa should take full responsibility for not only the Grasse River, but the St. Lawrence River and surrounding water as well.

Sincerely,

A handwritten signature in cursive script that reads "Jackie Benedict". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

To the U.S. environmental agency:

She; kon my name is Rotonhahere (Dawson) David I am a senior from Salmon River Central School, I am in native studies and we recently have been talking about the environment and we were given the task to write a letter to you. I would like to inform you that you should focus a little more on the animals.

I think that the environmental group should start asking Alcoa to clean up every little spot that they use. The water that they leave polluted harms the animals that drink from it and if they don't take responsibility soon we might lose all the animals from around there. The animals that we use as resources when they drink from it and then we eat the animals we're the ones that pay the price for their mistreatment of the water.

I believe that if Alcoa cleans the water it will be better for us and the animals that use the water also. Hopefully one day we'll be able to eat deer or fish without any worries of pollution harming us. Our future generations well have nice clean water if we decide to clean the river better.

Sincerely,

A handwritten signature in cursive script that reads "Dawson David". The letters are fluid and connected, with a prominent loop at the end of the word "David".

Dawson (Rotonhahere) David

(Name) Teena Thompson

(City)

U.S. FOIA Exemption 6 Redaction

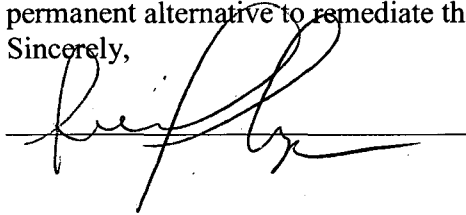
Ms. Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young Chang,

I, Teena Thompson (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,



(Name) *Couraney Jacobs*

U.S. FOIA Exemption 6 Redaction

(City)

Ms. Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young Chang,

I, *Couraney Jacobs* (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Couraney Jacobs

(Name) *Carol Ann Thompson*

(City) **U.S. FOIA Exemption 6 Redaction**

Ms. Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young Chang,

I, *Carol Ann Thompson* (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Carol Ann Thompson

(Name) Pamela Jacobs

U.S. FOIA Exemption 6 Redaction

(City)

Ms. Young Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Young Chang,

I, Pamela Jacobs (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

Dear Young Chang,

I, PETER LAFRANCE (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,



Fill out the information below if you wish to receive a reply notice.

(Name) _____

(Address) _____

(City) _____ (State) _____ (ZIP Code) _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

Dear Young Chang,

I, Irish LaFrance (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Irish LaFrance

Fill out the information below if you wish to receive a reply notice.

(Name) _____

(Address) _____

(City) _____ (State) _____ (ZIP Code) _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River. The proposed remedy is not a protective remedy nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit. For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for traditional Mohawk uses the toxins must be removed.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

I am requesting a response letter:

Name (print): David P. White

Address

City

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

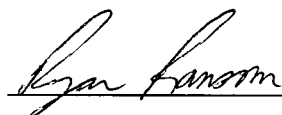
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Sken:nen,



I am requesting a response letter:

Name (print): Ryan Ransom

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

I am requesting a response letter:

Name (print): STAN BURNAM

Address:

City:

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): LYNN M LAFRANCE

Address:

U.S. FOIA Exemption 6 Redaction

City:

U.S. FOIA Exemption 6 Redaction

10/11/2008

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

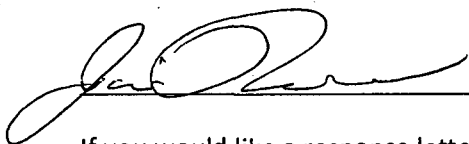
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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): Jari Thompson

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Doris Cook

If you would like a response letter, please fill out the following information:

Name (print): DORIS COOK

Ad **U.S. FOIA Exemption 6 Redaction**

Cit

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River.

The proposed remedy is not protective nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions taken for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for generations. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantation and harvesting resources in and along the Grasse River.

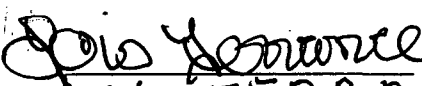
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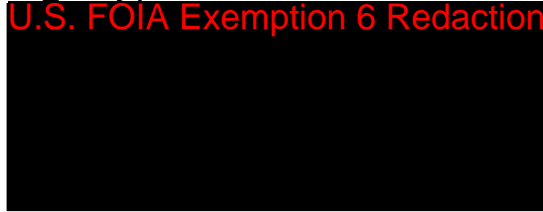
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It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Signature:  Date: 10/27/12
Print Name: LOIS TERRENCE

Address: **U.S. FOIA Exemption 6 Redaction**


Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River.

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Sken:nen,

Signature: Arvilla M. Thomas Date: 10-27-12
Print Name: Arvilla M. Thomas
Address: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature: Hilda King Date: Oct. 27, 2012
Print Name: HILDA KING
Address: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature:

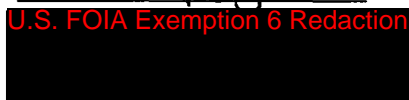
Damien Thompson

Date: 10/27/12

Print Name:

Damien Thompson

Address:

U.S. FOIA Exemption 6 Redaction


Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature:

Wende Cole

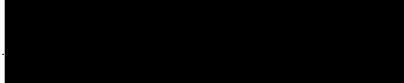
Date: *10/27/12*

Print Name:

Wende Cole

Address:

U.S. FOIA Exemption 6 Redaction



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature:



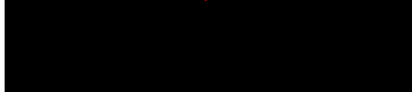
Date: 10/27/12

Print Name:

Hunter Thompson

Address:

U.S. FOIA Exemption 6 Redaction



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature:  Date: 10/27/12

Print Name: Larry Thompson

Address: **U.S. FOIA Exemption 6 Redaction**



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River.

The proposed remedy is not protective nor is it a permanent remedy. As a Mohawk, I have a responsibility to consider the effects of any actions taken for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for generations. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantation and harvesting resources in and along the Grasse River.

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Sken:nen,

Signature: Y. Norris

Print Name: Y. Norris

Address:

U.S. FOIA Exemption 6 Redaction

Date: 10-26-12

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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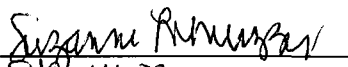
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Sken:nen,

Signature:



Date:

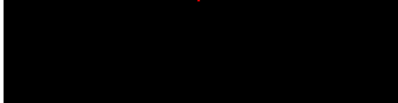
10/26/12

Print Name:

Suzanne Murray

Address:

U.S. FOIA Exemption 6 Redaction



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Maxine Cole

If you would like a response letter, please fill out the following information:

Name (print): Maxine Cole

Ad **U.S. FOIA Exemption 6 Redaction**
Cit **U.S. FOIA Exemption 6 Redaction**

10/10/2008

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
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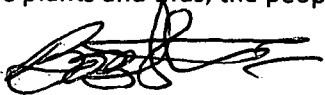
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Sken:nen,



Bob STEVENSON

U.S. FOIA Exemption 6 Redaction



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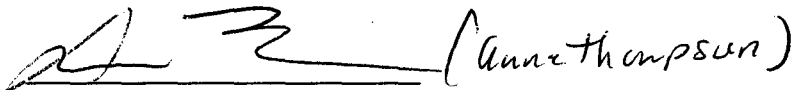
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Sken:nen,

 (Anne Thompson)

akwesasne

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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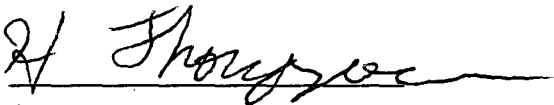
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Sken:nen,



HARRY THOMPSON
AKWESASNE

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U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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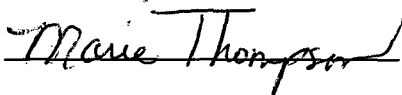
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Akwesasne

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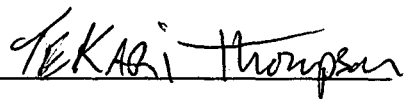
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Sken:nen,



STEWART PETERS
AKWESASNE

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290 Broadway, 20th Floor
New York, NY 10007-1866

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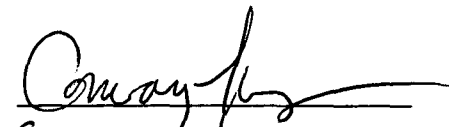
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Sken:nen,


Conway Thompson
AKWESASNE

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U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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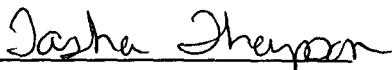
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Sken:nen,



Tasha Thompson

Akwesasne

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Summer Bero

If you would like a response letter, please fill out the following information:

Name (print): Summer Bero

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Page 1 of 1

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Cody Terrance

If you would like a response letter, please fill out the following information:

Name (print): Cody Terrance

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

10/18/19

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Ashton Adams

If you would like a response letter, please fill out the following information:

Name (print): Ashton Adams

Address: **U.S. FOIA Exemption 6 Redaction**
City: **U.S. FOIA Exemption 6 Redaction**

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Sken:nen,

Bradley Rickerl


If you would like a response letter, please fill out the following information:

Name (print): Bradley Rickerl

Address

City

U.S. FOIA Exemption 6 Redaction



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Sken:nen,

Georgina R. Mitchell

If you would like a response letter, please fill out the following information:

Name (print): Georgina L. Mitchell

Ad

Cit

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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Sken:nen,

Paulette White

If you would like a response letter, please fill out the following information:

Name (print): Paulette White

Address: **U.S. FOIA Exemption 6 Redaction**
City: **U.S. FOIA Exemption 6 Redaction**

10/11/2008

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

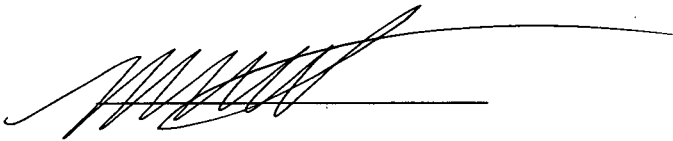
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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): Margaret Jacobs

Ad **U.S. FOIA Exemption 6 Redaction**

Cit **U.S. FOIA Exemption 6 Redaction**

10/10/10

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Thomas G. Terrance

If you would like a response letter, please fill out the following information:

Name (print): Thomas G. Terrance

Ad

U.S. FOIA Exemption 6 Redaction

Cit

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

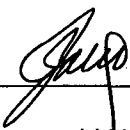
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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

Dear Young Chang,

I, Paula McCargan (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Paula McCargan

Fill out the information below if you wish to receive a reply notice.

(Name) _____

(Address) _____

(City) _____ (State) _____ (ZIP Code) _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

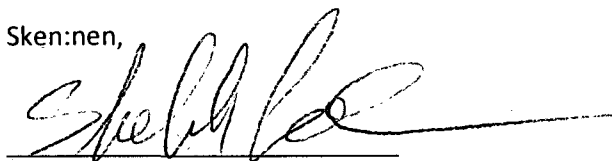
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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): Sheldon Cole

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

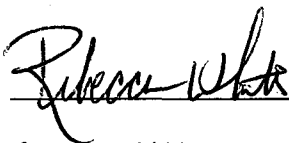
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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): REBECCA WHITE

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

10/10/2009

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Teresa Oakes

If you would like a response letter, please fill out the following information:

Name (print): Teresa Oakes

Address: **U.S. FOIA Exemption 6 Redaction**

City:



Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): Louise Thompson

A

Ci

U.S. FOIA Exemption 6 Redaction

EXPRESS

Express

Teresa Seymour
SRMT ENVIRONMENT DIVISION
449 Frogtown Road

HOGANSBURG, NY 13855



J12201209200325

SHIP TO: (212) 637-4253 **BILL THIRD PARTY**
Young Chang, Remedial Proj Manager
USEPA
ERRDNYRB
290 Broadway, 20TH Floor
New York, NY 10007

Actual G.W. LB
CAD: 1446026/NET3300

Delivery Address Bar Code

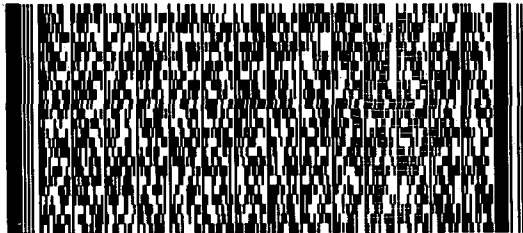


11/20/12

Ref # ALCOA Oversight
Invoice #
PO #
Dept #

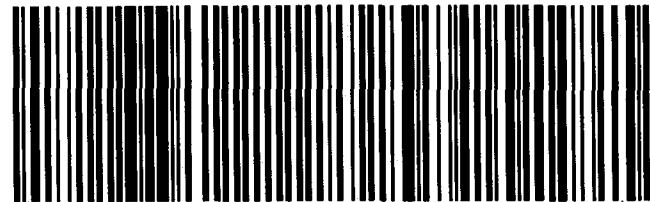
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PRIORITY OVERNIGHT

TRK# 7941 1549 1221
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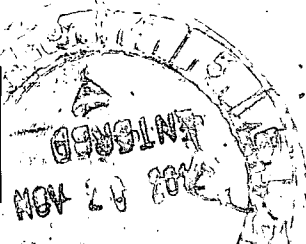


EA PCTA

10007
NY-US
EWR



515G3/EE3B/AA44



After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.

11-21-12

To: Young Chang

As a resident of the Village of Massena, I wish to give my opinion on the Grasse River Clean-up plan.

I feel that Capping areas where high concentrations of P.C.B's is the best way. Dredging will only spread the P.C.B's to other areas in large amounts, all at once. Then, there is the huge amount of contaminated river bottom that will need to be disposed of someplace.

The earth, over time, seems to heal it self.

The people complaining about high cancer rates because of the river should take a look at their own actions. Some of this cancer could be coming from the manufacturing and selling of cheap tax-free cigarettes.

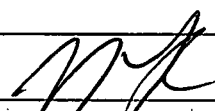
These same people complain about not being able to feed their families because they can't eat the fish from the Grasse River.

these people are slaughtering
the walleye population by netting
and spearing the walleye during
the spawn.

I hope the E.P.A. will make a
decision that will satisfy most
of the people in the area.

Thank-you for your time.

Sincerely,


James R. Laba

U.S. FOIA Exemption 6 Redaction



RE: Grasse River Remediation

Date: 11/23/12

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

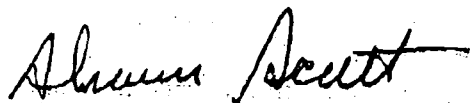
Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

As an Alcoa employee I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,100 hardworking men and women. The Grasse River remediation is important to everyone at Alcoa.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely: Shawn Scott



RE: Grasse River Remediation

Date: 11/23/12

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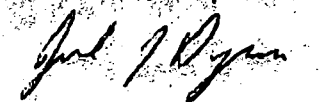
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Sincerely,

Joel Dupree


RE: Grasse River Remediation

Date: 11/23/12

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Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

I am requesting a response letter:

Name (print): Jeannie Tarbell

Addr: **U.S. FOIA Exemption 6 Redaction**

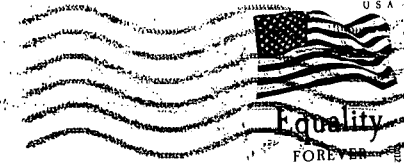
City: **U.S. FOIA Exemption 6 Redaction**



Jeannie Tarbell **
U.S. FOIA Exemption 6 Redaction

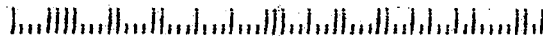
SYRACUSE NY 132

23 NOV 2012 PN 3 L



Young S. Chang Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

10007186699





RE: Comment on the Grasse River proposed plan

Michaela Lewis

to:

Young Chang

11/26/2012 05:01 PM

Hide Details

From: Michaela Lewis <

U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

History: This message has been replied to.

November 26th, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency

Dear Ms. Chang,

My name is Michaela Lewis and I am a student at St. Lawrence University. I am writing you in regards to the Environmental Protection Agency's clean-up proposal for the Grasse River. I attended the public meeting the held at Akwesasne last week and I am not satisfied with the Alternative 6 project offer. The proposed Alternative 6 clean-up includes a mixture of armored capping, main stream capping, and dredging. The construction time was estimated at four years. This proposal is simply not good enough for the situation is more delicate and severe than E.P.A.'s project plan accounts for.

Many people at the meeting pushed for Alternative 10, but I believe it would be unrealistic. I suggest Alternative 8. The plan gives more attention to the river, but cost less time and money than Alternative 10. The contamination has been in the river for thirty years so it is imperative that clean-up is considerable in order to speed up nature's recovery. I do not claim to be a scientist, but I do know that this contamination has had tremendous ecological consequences. Alternative 6 will not lower PCB levels enough to show the significant improvements the habitat needs. The E.P.A must remember that nature interacts with each other. If this part of the river is contaminated, the particles could eventually

12/5/2012

diffuse into other areas.

It is important for the government to start planning for the worst possible situations to in order to prevent damage. As seen with storm Sandy the environment is hard to predict. Scientists have theories, but people do not truly know what nature has in store for us. The armored capping proposed by Alternative 6 will hypothetically survive North Country ice storms, but the only way to know is by trying. In order to eliminate doubt, a more elaborate plan needs be enacted. This way it can be more certain to work properly, potentially saving the agency future time and money. Perhaps, the more environmental precautions taken the less clean-up there will be needed.

On top of environmental reasons to change the plan, there are also social reasons. It was obvious that the people of Akwesasne did not approve of this plan. For cultural and spiritual reasons the Mohawk people have a large investment. This river is very important to them, more than any non-native would understand. It is their land and they have a strong voice against the Alternative 6 plan. The Mohawk are clear in their stance and need to be heard. If they are not, the federal government is sending a bigger message to Natives across the country; one that says the U.S. government trumps Natives' liberties. This is an opportunity to work with the community by listening to them. Akwesasne wants a more elaborate plan and the E.P.A. needs to take that opinion more heavily into consideration. They have separate rights to this river.

I also live in the area and am frequently on the reservation. I have an investment in the Grasse River because those PCBs may potentially be consumed by me. For the same health reasons Mohawks have, I do not feel comfortable with the agency's proposal. Many fellow students and North Country community members feel that the clean-up should be a more elaborate plan. Please uphold our right to live in a healthy environment.

It is only right to do the most we can to clean-up this river. It has been too long for this problem to be dealt with and now needs to be completed properly. Alternative 6 project proposal for the Grasse River is not eliminating the contamination enough for this river. The Environmental Protection Agency must recognize this and modify the proposal before proceeding on a course of action. I applaud the agency for allowing public commentary. It is now important to listen to us and take our suggestions into consideration. Thank you for the time.

Sincerely,
Michaela C. Lewis

From: Chang.Young@epamail.epa.gov [Chang.Young@epamail.epa.gov]
Sent: Monday, November 26, 2012 4:42 PM
To: Michaela Lewis
Cc: Romanowski.Larisa@epamail.epa.gov
Subject: Comment on the Grasse River proposed plan

From: Michaela Lewis [mclewi10@stlawu.edu]
Sent: 11/26/2012 04:41 AM GMT
To: "chang.young@eps.gov" <chang.young@eps.gov>
Cc: Larisa Romanowski
Subject: Commentary on Grasse River proposal

Dear Ms Lewis.

I had received an email from you forwarded to my personal email address with an attachment which I have not opened since I am not sure if it is a spam or not. Ms. Romanowski is on maternity leave, would you mind resending your comment letter to my work email address at chang.young@epa.gov?

12/5/2012

Your first delivery did not come to me because of "s" instead of "a."

Please ignore this message if you had not submitted a comment letter.

Thank you.

Young Chang
Project Manager
US EPA Region 2
290 Broadway, 20th Floor
New York, NY 10007
212-637-4253
212-637-3966 fax



THE SENATE
STATE OF NEW YORK

SENATOR PATTY RITCHIE
48TH DISTRICT
OSWEGO, JEFFERSON, ST. LAWRENCE COUNTIES

November 26, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, N.Y. 10007-1866

Dear Mr. Chang,

As someone who grew up in Northern New York and who now represents much of St. Lawrence County in the New York State Senate, I believe that Alcoa's Massena operations is a major asset to our region.

As the largest private employer in Northern New York, the company provides jobs for over 1,000 people. For most of the past century, St. Lawrence County's aluminum operations have been one of upstate New York's major economic engines.

Not only does the company provide high paying private sector jobs, but Alcoa and its employees buy goods and services from hundreds of local businesses, providing thousands of other jobs that are directly dependent on the company's continued operations.

At a time when the U.S. and New York State have been losing manufacturing jobs, and many companies have been moving operations off shore to third world countries, it is very important to help insure the future of our remaining domestic manufacturing companies.

Over the past two years, I have been meeting with Alcoa and area unions to discuss the future of the company in Northern New York and how New York State can encourage the company to invest in modernizing its operations which is critical to thousands of families and hundreds of small businesses across Northern New York.

That's why it is critical that we work together to develop a comprehensive, scientifically based cleanup plan for the Grasse River, one of our State's most beautiful waterways, to insure the safety of the people of the St. Lawrence Valley.

REPLY TO: ALBANY OFFICE: ROOM 815 LEGISLATIVE OFFICE BUILDING, ALBANY, NEW YORK 12247 (518) 455-3438

JEFFERSON COUNTY OFFICE: 317 WASHINGTON STREET, ROOM 418, WATERTOWN, NEW YORK 13601 (315) 782-3418

OSWEGO COUNTY OFFICE: 46 EAST BRIDGE STREET, FIRST FLOOR, OSWEGO, NEW YORK 13126 (315) 342-2057

ST. LAWRENCE COUNTY OFFICE: 330 FORD STREET, OGDENSBURG, NEW YORK 13669 (315) 393-3024

E-MAIL: RITCHIE@NYSenate.GOV

WEBSITE: WWW.RITCHIE.NYSenate.GOV



CHAIR
SENATE AGRICULTURE COMMITTEE

COMMITTEES
COMMERCE, ECONOMIC DEVELOPMENT
& SMALL BUSINESS

CRIME VICTIMS, CRIME & CORRECTION
CULTURAL AFFAIRS, TOURISM, PARKS &
RECREATION

ENERGY & TELECOMMUNICATIONS
HIGHER EDUCATION

HOUSING, CONSTRUCTION &
COMMUNITY DEVELOPMENT

LOCAL GOVERNMENT

MEMBER
LEGISLATIVE COMMISSION ON
RURAL RESOURCES

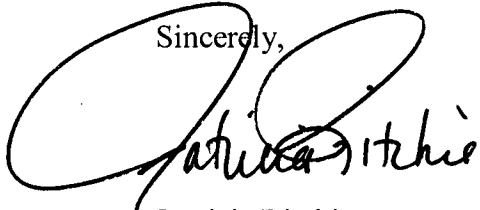
After two decades of scientific study, it's imperative that the U.S. Environmental Protection Agency work with Alcoa and local communities to protect human health and the environment. Alcoa's proposal to spend almost a quarter of a billion dollars to cap the sediment layer containing PCBs in the Grasse River and install an armored cap to prevent the risk of ice jam scouring offers a long term solution to this problem that can immediately reduce the risk of pollution in both the Grasse River and the St. Lawrence River.

As many of the scientific studies have already shown, the longer we put off taking action, the more likely it is that ice scouring in some sections of the Grasse River will continue unearthing buried PCBs and releasing them into the river. Past studies have already shown the consequences of unintended releases of buried PCBs into the river and the effect on a wide variety of species. Eventually the PCBs that are unearthed and released back into the river show up in our sport fish population.

Aside from the jobs generated by Alcoa, one of St. Lawrence County's other major industries is its tourism and fishing related business. Allowing the buried PCBs to continue contaminating the rivers' habitats serves no purpose when scientific studies have shown the problems can be addressed.

After decades of debate and endless studies, it is time for the U.S. EPA to accept the verdict of the scientific community and work in partnership with Alcoa and the North Country community to address this problem.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia Ritchie". The signature is fluid and cursive, with a large loop at the beginning.

Patricia Ritchie
State Senator

CC: United Steelworkers
Laurie Marr, ALCOA

PAR:jer

November 26, 2012

Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Project Manager Chang,

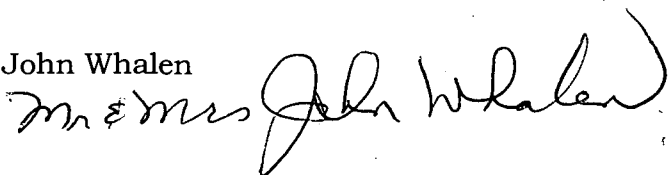
We live on the south shore of the Grasse River in an area of the river which is presently targeted for armored capping and perhaps near shore dredging just east of Route 131. We have seen studies which indicate that subsequent to dredging, the level of PCB's in the water column (and by extension fish) has risen significantly. This is obviously a concern to us.

While your Superfund Proposed Plan clearly indicates that alternatives #3 through alternative #6 are clearly most desirable, it is unclear to us why near shore dredging is included in the plan. Near shore dredging leads to a longer recovery and an increased level of PCB's in the near term. As property owners who live on the river and as individuals who regularly enjoy boating on the river, we have concerns about any increases in the level of PCB's.

Generally, however, it is evident in your report that an alternative which includes capping (3-6) is desirable and we encourage you for the good of the environment and community to initiate this project as quickly as possible.

Sincerely,

John Whalen

A handwritten signature in black ink that reads "Mr & Mrs John Whalen". The signature is written in a cursive style.

Julie Whalen

U.S. FOIA Exemption 6 Redaction





Grasse River Remediation Project
Parnapy, Dale J. to: Young Chang

11/26/2012 12:50 PM

From: "Parnapy, Dale J." <Dale.Parnapy@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Chang:

I am writing to convey my support for the \$243 million proposed plan for the Grasse River remediation project.

As you know Alcoa wants to modernize the Massena Plant. Without knowing how much it is going to cost to clean up the river, Alcoa will not invest money in modernization. If the plant is not modernized it will close. I am 54 years old and have been employed by Alcoa for the past 24 years. I can't imagine getting laid off and having to start over. What would I do? Where would I go? I don't know.

I am sure Alcoa can find other places in the world to invest. We have an opportunity to make it happen in New York State. Please move forward quickly on this project.

Respectfully yours,

Dale Parnapy

U.S. FOIA Exemption 6 Redaction

dale.parnapy@alcoa.com



Grasse River Cleanup

Andy McMahon

to:

Young Chang

11/26/2012 04:03 PM

Hide Details

From: "Andy McMahon" <amcmahon@massenaelectric.com>

To: Young Chang/R2/USEPA/US@EPA

"I can't imagine us going with anything less than (the proposed plan)," she said. "Most of the comment was either in support of (the proposed plan) or called for more dredging, which you'd get with (the other) alternatives."
Daily Courier Observer 11/20/12

Project Manager Chang,

Since reading your comments in the aftermath of the public meetings on the Grasse River Cleanup I have spoken to a number of people throughout Massena - many who have commented to EPA, and there is great concern with your interpretation of our position on this matter. Specifically, for those of us who have read the plan, Alternative 3, 4, 5, and 6 make the most sense as they continue the river on its present course of improvement and moves us forward as quickly as possible towards a clean river. Clearly, alternatives 3, 4, and 5 are cheaper than alternative 6. Further, Alternative 3 has the most immediate impact toward improving the health of the river while spending far less money. If the EPA is intent on doing what is best for the river AND getting a certain amount of money out of Alcoa I would endorse Alternative 3 and use the difference between Alternative 3 and 6 for an economic development fund. This would be best for the river based on technical merit and best for the host community in helping us recover economically from this damage.

To be clear, I am confident that if Alcoa had pushed for another alternative, particularly 3, there would have been plenty of genuine local support. It is Alcoa's support that has led to the general local endorsement of Alternative 6 - it is not a minimum threshold that we have devised. Rather, it is an endorsement of a balance between environmental

11/27/2012

health and economic health. For me, and for many of my neighbors, this endorsement sets aside personal concerns for the technical merits of near shore dredging. EPA on the other hand seems prepared to advocate more dredging in spite of data which demonstrates it has an adverse effect. I encourage you to speak to the people who live in Massena to see if I have properly identified the issue. I especially encourage you to consult the land owners who live on the Grasse River around Rivercrest Drive, Shoreline Drive and CR 42 in Massena Center to determine the accuracy of my interpretation of local sentiment. I think it is important for EPA to understand the motivation of comments (environmental/economic balance) and the technical concerns (near shore dredging). Based on your comment in the DCO, I am concerned you have an errant perception about a local minimum threshold for cleaning the river.

Sincerely,

Andrew J. McMahon, P.E.

Superintendent

Massena Electric Department

71 East Hatfield St.

Massena, NY 13662

315-764-0253

315-250-2569

Town of Massena, New York
Established: 1802

Town Hall
60 Main Street
Massena, New York 13662

315-769-3588
(Fax) 315-769-0578

<http://www.massenaworks.com/town/index.asp>

Councilmen: Robert Cunningham, John Macaulay, Charles Raiti, Albert Nicola
Supervisor: Joseph D. Gray

November 27, 2012

Ms. Young Chang
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang:

On behalf of the Massena Town Council and the citizens of the Town of Massena, I write to express our support for a Grasse River cleanup plan that is environmentally responsible, can move forward as quickly as possible and allows Alcoa's Massena Operations to remain economically viable and profitable for many more years.

While we value a clean environment and restoration of our beloved Grasse River, the Town Council wants to ensure the continuation of as many good-paying jobs as possible for area citizens for decades to come.

We believe these two goals can be easily accomplished together in one plan. The Proposed Remedial Action Plan your agency put forth earlier this month makes sense environmentally. Likewise, Alcoa officials have said the company finds the financial component acceptable.

For the better part of two decades, our community has watched and participated in the study of Grasse River remediation. We believe the time has come for a final decision and action.

Therefore, the Massena Town Council urges you to take whatever steps necessary to finalize this plan, and further we ask that EPA's Regional Director give it immediate final approval so the remediation work can begin as quickly as possible.

Sincerely,


Joseph D. Gray, Town Supervisor



Grasse River PRAP - Public Comment

Tulga, Christopher J

to:

Young Chang

11/27/2012 09:49 AM

Hide Details

From: "Tulga, Christopher J" <Christopher.Tulga@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Chang:

I am writing to express my complete support for the Grasse River cleanup PRAP.

As residents of Massena, my wife, two children and I recognize both the need for the preservation of our local natural resources and the protection of human health. As an Alcoan, with nearly all of my extended family (24 people) living in Massena and Potsdam, I recognize the reliance of the North Country economy on a business that easily provides more than 1,000 quality jobs. My brother in-law and I are both currently employed by Alcoa; my uncle was employed hauling aluminum finished goods out of, and recyclable material back to Massena. My father in-law pastors at a church, where several of the supporting members are life-long Alcoan's both active and retired. At a time when Massena and the North Country are still feeling the drastic effects of the loss of GM, Alcoa feeds our families.

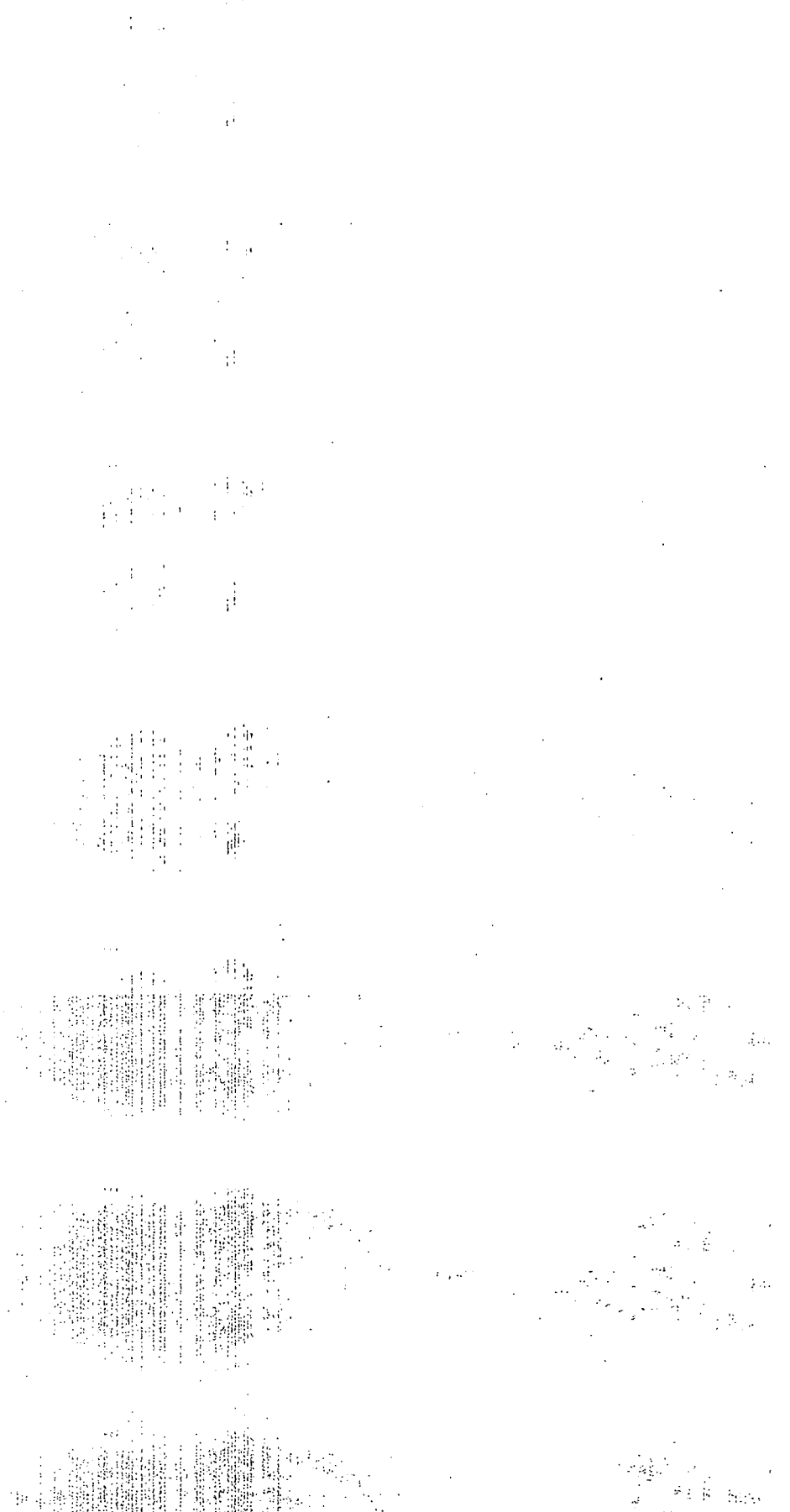
I regularly fish the St. Lawrence, Grasse and Raquette rivers with my wife and daughter, dad, father-in law and nephew. My sister owns riverfront along the Raquette, I care deeply about the environmental impact of the project. You will undoubtedly receive letters and be urged by some to require a more aggressive clean-up plan, but that would be cost prohibitive and lack any genuine environmental benefit over the current proposal. From a scientific, environmental and economical standpoint I urge you with great conviction to move forward with the PRAP. Let's get the river cleaned up and make the proposed modernization/long term employment commitment from Alcoa a reality now.

Thank you for your support in making the best decision possible for the environment, and community, and moving forward with the proposed remedial action plan.

Sincerely,

11/27/2012

Christopher J. Tulga, Citizen of Massena, Avid Fisherman, Alcoan





Grasse River PRAP - Public Comment

Pam Tulga

to:

Young Chang

11/27/2012 09:51 AM

Hide Details

From: Pam Tulga U.S. FOIA Exemption 6 Redaction

To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Chang:

I am writing to urge you to make the best decision possible for the environment and community here in Massena, NY and move forward with the proposed remedial action plan for the Grasse River without further delay.

Having grown up here and returned to live in Massena, my husband, two children and I recognize the need for the preservation of our local natural resources and the protection of human health. As a wife and mother, with nearly all of my extended family (24 people) living in the immediate area, I recognize the reliance of the North Country economy on a business that easily provides more than 1,000 quality jobs. Our family and my sister-in-laws' both currently rely on Alcoa paychecks; my father pastors at a church, where several of the supporting members are life-long Alcoa's both active and retired. At a time when Massena and the North Country are still trying to survive the loss of GM, the only other major source of quality employment in the area; Alcoa puts food on our table and clothes on our children's backs.

My husband and I regularly take our children fishing and to parks along the St. Lawrence, Grasse and Raquette rivers, it is extremely important to us that we continue to enjoy and preserve these resources throughout our lives and for future generations. You will undoubtedly receive passionate letters from some who don't have the scientific facts to push for a more expensive clean-up plan, assuming it must be better simply because it costs more. While the input you receive (other letters, phone calls, e-mails etc.) may be emotional, the issue is scientific and economic in nature.

Thank you for your support in getting our river cleaned up and keeping these valuable jobs in our community by moving ahead with the proposed remedial action plan without further delay.

Sincerely,

11/27/2012

Pamela A. Tulga, Mother, Wife of an Alcoa, Concerned Citizen of Massena



Grasse River Cleanup Plan

Mike Hayden

to:

Young Chang

11/27/2012 09:54 AM

Hide Details

From: Mike Hayden <[redacted]>

To: Young Chang/R2/USEPA/US@EPA

November 27, 2012

Michael Hayden

[redacted]

Dear Ms. Chang,

I'd like to voice my support for the proposed PRAP. Growing up in Massena and now owning a home plus business here, I believe it makes sense to move forward with the cleanup plan. From the information I've seen, it appears that science is behind the resulting proposal. I frequently boat and enjoy the Grasse/St. Lawrence river during the summer months. I feel as though a cleaner river is the ultimate goal. I am happy to know that Alcoa is committed to the area and to incurring the costs associated with this plan to better human and environmental health. The majority of my family have been lifetime Massena residents and business owners. A positive outcome that benefits the environment, while continuing to support the lone industrial employer, can only be a benefit to all parties involved.

Thank you,

Michael Hayden



Francia, Mark S. to: Young Chang

11/27/2012 04:01 PM

From: "Francia, Mark S." <Mark.Francia@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

From: Mark S. Francia

U.S. FOIA Exemption 6 Redaction

Ms. Chang,

As a lifelong resident of Massena and a proud employee of Alcoa, I support the proposed Grass River Remediation plan put forth by the EPA and urge a quick Record of Decision implementing said plan. My father, brother and I together have recorded over 100 years of employment with Alcoa and have raised families as well as contributed to the local economy. Future generations hopefully will have these same opportunities. I also feel Alcoa should have the opportunity to responsibly correct the Grass River problem while maintaining the right to stay economically viable in Massena for years to come. I applaud your decision in that it was fact based with no emotional bias.

Regards,
Mark S. Francia

Nov. 28, 2012

Greetings,

I hope you are well and enjoying good health today.

I recently read something that reminds me of the current situation in re the clean-up of the Grasse River. "... the worlds in which different societies live are distinct worlds, not merely the same world with different labels attached." (D'Arcy McNickle, 1959). We as Mohawk people are certainly aware of the non-Native world view, but you don't seem to be aware, nor care, that we look at the world very differently. I hope that you can find your way to a more respectful view of this Earth, and all the universe, that we all share.

Emily Tarrill
Akwesasne

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

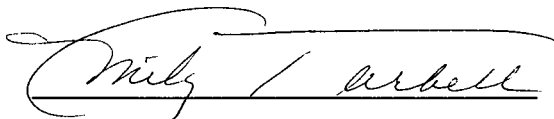
This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River. The proposed remedy is not a protective remedy nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit. For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for traditional Mohawk uses the toxins must be removed.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,



I am requesting a response letter:

Name (print): _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

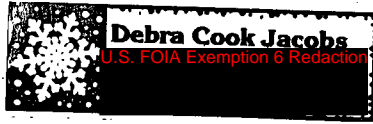
Use the technology to clean the poison out. Alcoa must dredge it and clean (restore) this land once and for all, not a temp. capping to save money.
Debra Cook Jacobs

I am requesting a response letter:

Name (print): Debra Cook-Jacobs

Address: U.S. FOIA Exemption 6 Redaction

City:



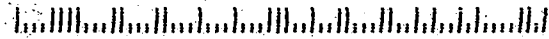
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28 NOV 2012 PM 3 L



Young S. Chang, Remedial Proj. Manager
US EPA
290 Broadway, 20th Floor
New York NY ~~10007~~ 10007-1866

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November 28, 2012

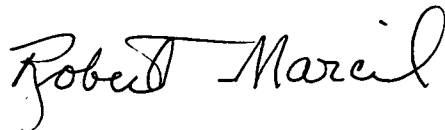
Ms. Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

I write today to offer my support to the EPA Proposed Plan for the Cleanup of the Grasse River.

Alternative 6 offers an immediate path to recovery to supplement the on-going point source controls which have been enacted through the last 2 decades. Over this time many studies and demonstration projects have been done to "inform" the EPA and the stakeholders. Based upon this development of information I am willing to accept the EPA's recommendation for Alternative 6 though a Cap Only solution (alternative 3) seems, by your own report, to have more mid and long term benefit.

Sincerely,



Robert Marcil

U.S. FOIA Exemption 6 Redaction





Grasse River comments

to:

Young Chang

11/28/2012 01:18 PM

Cc:

John.Martin, Laurie.Marr, amcmahon, real_coupal, jhidy, jpward, supervisor, ksth, pkelly, mgleason, rclough, ccorcoran, tom, president

Hide Details

From: U.S. FOIA Exemption 6 Redaction Sort List...

To: Young Chang/R2/USEPA/US@EPA

Cc: John.Martin@alcoa.com, Laurie.Marr@alcoa.com, amcmahon@massenaelectric.com, U.S. FOIA Exemption 6 Redaction, jhidy@village.massena.ny.us, jpward@stlawrencegas.com, supervisor@town.massena.ny.us, ksth@co.st-lawrence.ny.us, pkelly@slcida.com, mgleason@massenachamber.com, rclough@mcs.k12.ny.us, ccorcoran@massenahospital.org, tom@sosupply.com, president@clarkson.edu

1 Attachment



fishcap_ilovery.jpg

To: Ms. Young S. Chang, EPA
Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

After 20 years of study, the EPA released a proposal last month to remediate the Grasse River near Alcoa, Massena Operations.

Called the "Proposed Remedial Action Plan" (or PRAP), the EPA's recommended proposal calls for the dredging of some adjacent shore sediments, capping the main channel, and

armored capping for the ice-scour prone sections of the Grasse River.

On October 30, 2012, the St. Lawrence County Legislature agreed with the EPA's recommended plan and approved that plan with County Resolution 276-2012.

The St. Lawrence County Chamber of Commerce understands that said plan is estimated to cost nearly \$234 million, take two to three years to design, plus an estimated four construction seasons to implement. However, the Chamber feels it is imperative to move beyond study as soon as possible so that the greater North Country community can enjoy the benefits of remediation by eliminating threats to human health and the environment from hazardous substances released into the river through years of disposal practices.

This Chamber supports the EPA's Proposed Remedial Action Plan.

Sincerely,
Pat McKeown

Pat McKeown, Executive Director & CEO
St. Lawrence County Chamber of Commerce
St. Lawrence-North Country Services Corporation
St. Lawrence-North Country Community Foundation, Inc.
Coordinator FISHCAP

101 Main Street
Canton, NY 13617
(315) 386-4000
(315) 379-0134 fax
www.northcountryguide.com
www.fishcap.net

The mission of the St. Lawrence County Chamber of Commerce is to cultivate, develop and support Chamber members and other businesses by creating a vibrant business climate that encourages growth and enhances the unique quality of life in St. Lawrence County.





Grasse River Remediation Project
DeRuchia, Michael K. to: Young Chang

11/28/2012 11:56 AM

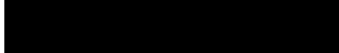
From: "DeRuchia, Michael K." <Michael.DeRuchia@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Ms. Chang,

As a resident of the North Country for the past 42 years I am in support of EPA's proposed remedy, known as alternative #6. I hope this goes through and gets started as soon as possible.

Michael Deruchia

U.S. FOIA Exemption 6 Redaction





Grass River Remediation

Tom Seguin

to:

Young Chang

11/28/2012 09:49 AM

Hide Details

From: "Tom Seguin" <[redacted]> U.S. FOIA Exemption 6 Redaction

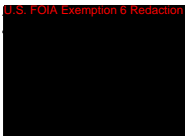
To: Young Chang/R2/USEPA/US@EPA

I'm writing in support of the plan for Grass River. I have lived here all my life and feel that Alcoa is a asset to this area. I fully believe in what they propose to do to rectified the grass river. I have been a employee at Reynolds Metals now ALCOA, for 24 years and and to retire from here in 6 years. I have through out the years seen all that has been done to come up with a solution to the problem of the Grass River .I now feel Alcoa has reached a satisfactory solution.

Therefore I give my support to move forward and approved the fix Alcoa has proposed.

Thank you

Thomas J. Seguin





Mariano, Scott F. to: Young Chang

11/28/2012 09:57 AM

From: "Mariano, Scott F." <Scott.Mariano@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Please move the process forward



grass river cleanup

Bradish, Bruce A. to: Young Chang

11/28/2012 09:59 AM

From: "Bradish, Bruce A." <Bruce.Bradish@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

To whom it may concern,

I feel as an employee of alcoa that they truly care for the community of Massena and the surrounding areas. They would not recommend a cleanup option that they felt would not be in the best interest of the areas I mentioned. They are looking at long term commitment to this area and it is in their best interest as well to make sure this cleanup is a safe remedy for all. After all, this is their workforce that lives in this area so I'm sure they would not want to put us in any danger by not properly addressing this problem. Well, thank you for your time and consideration of this matter.

Sincerely,

Bruce Bradish (19 yr. alcoa employee)



EPA Proposal - Alternative #6

Tremper, Michael W.

to:

Young Chang

11/28/2012 10:14 AM

Hide Details

From: "Tremper, Michael W." <Michael.Tremper@alcoa.com>

To: Young Chang/R2/USEPA/US@EPA

Ms. Young S. Chang, Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang,

I am writing with regards to the current EPA Grasse River proposal known as 'Alternative #6'. I would like to express my complete support for this proposal. After having had an opportunity to look over the proposed solution, I was glad to learn that the proposal not only addresses the immediate PCB concerns, but also takes into consideration variations to the water and ice flows. As an employee of Alcoa, I must confess that my interests are driven largely in part to my continued employment, however, I would never consider putting my job ahead of the safety of our communities. Again, thank you for working with Alcoa to find a solution which makes sense.

Sincerely,

Michael Tremper
Staff Maintenance Electrical Engineer
Alcoa - Massena West

U.S. FOIA Exemption 6 Redaction



Grasse River
Adey, John B. to: Young Chang

11/28/2012 10:28 AM

From: "Adey, John B." <John.Adey@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Ms. Young S. Chang,

I am an Alcoa employee, a resident on the Grasse river and fish in the Grasse as well.

I have read and understand the various options studied over the last 20 years and believe, from both a community/recreation standpoint as well as an Alcoa, that the EPA's proposed remedy is acceptable and would like to see the process (ROD) move forward very quickly.



Grasse River Remediation Proposal

Darcy Wilkins

to:

Young Chang

11/28/2012 10:36 AM

Hide Details

From: Darcy Wilkins <U.S. FOIA Exemption 6 Redaction>

To: Young Chang/R2/USEPA/US@EPA

Please respond to Darcy Wilkins <U.S. FOIA Exemption 6 Redaction>

Ms. Young S. Chang, Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866
November 28, 2012

Dear Ms. Chang,

As a lifelong resident of Massena, I would like to give my support to the proposal "Alternative #6" for the Remediation of the Grasse River. The time has come to move forward with the process and actually do something.

Thank you,

Ms. Darcy Wilkins

U.S. FOIA Exemption 6 Redaction



Grasse River Cleanup
Trippany, Kevin P. to: Young Chang

11/28/2012 10:43 AM

From: "Trippany, Kevin P." <Kevin.Trippany@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Chang:

I am strongly in favor of the EPA's proposed remedy, known as Alternative #6, which includes capping, armored capping and some near-shore dredging. After 20+ years of study, please move forward with action as soon as possible.

Thank you

Kevin Trippany
Ingot General Supervisor
Alcoa, Massena West
(315)764-4341
ActNet 8-240-4341
U.S. FOIA Exemption 6 Redaction
(315)764-4571 Fax



Massena, NY - Grasse River Dredging Public Comment

Joseph L Brant

to:

Young Chang

11/28/2012 11:10 AM

Hide Details

From: Joseph L Brant <jlb09@health.state.ny.us>

To: Young Chang/R2/USEPA/US@EPA

1 Attachment



Grasse River Dredging.doc

Mr. Young

Please accept this for the public comment on the proposed dredging of the Grasse River in the Town of Massena, New York.

(See attached file: Grasse River Dredging.doc)

Thanks,
Joe

November 28, 2012

U.S. Environmental Protection Agency
Remedial Project Manager

Mr. Young S. Chang

290 Broadway, 20th Floor, New York, NY 10007-1866 Re: Grasse River Dredging
Massena, St. Lawrence Co

Dear Mr. Chang:

I am writing to comment on the proposal to dredge the Grasse River due to PCB contamination from operations at Alcoa Inc. It is unfortunate that pollution was and is an acceptable practice for profit. If we are to move forward, we need to rethink how contaminated sites are cleaned up.

All of the impacts from pollution due to Alcoa's operations are not completely quantifiable. But as a result, it makes almost no sense to continue to pollute in order to "clean-up" pollution. Think about it this way: PCB's were discharged; now thousands of gallons of diesel fuel will be burned, who know how many more gallons of oil will be consumed in engine oil, making of tires, transmission fluid, hydraulic brake fluid, and the like to run the equipment for dredging operations. Then the sediment has to be transported to the landfill and clean material brought in to replace the dredged sediment. Based on numbers provided for the dredging, approximately 22,000 dump truck loads will have to be hauled (assumed 10 cubic yards per load). This does not include the amount of material that will be brought in to cap the 284 acres of contaminated soil that will not be dredged. Also the contaminated sediment will be placed in another location, which will contaminate that site even more. I realize that it will be placed in an approved landfill, but all landfills eventually leak and release the pollution that is held within them. So we are just moving the contamination from one location to another or bringing in clean fill to cap the contamination in place. As a society, I think we need to stop, take a step back, and rethink how to proceed. The damage is done, but do we continue to do more damage to clean it up? I would think that science could prove that it is more environmentally sound to just leave the contaminated sediment in place and try to foster natural systems to clean it.

Alcoa did profit from polluting and still does. I think there needs to be accountability for their actions, but paying to pollute more does not seem to be the best option. I advocate for taking the monies set aside for the dredging and use it to help the communities and families most impacted by the PCB contamination. For example, monies could be used to establish and maintain sustainable community gardens, sustainable housing, a community composting facility, and the like. I would also propose that Alcoa be made to undertake similar sustainability/waste reduction efforts at their facilities in Massena.

Please take this letter seriously and consider the overall impacts of such an operation.

Sincerely,

Joseph L. Brant, P.E.



Grasse River remediation
Bruce Smith to: Young Chang

11/28/2012 04:49 PM

From: Bruce Smith U.S. FOIA Exemption 6 Redaction
To: Young Chang/R2/USEPA/US@EPA

Sirs,

The proposed remediation by the EPA appears to me to be the best solution. There is no solution which is perfect. I believe that attempts to dredge all the PCBs from the river bed would inevitably flush large amounts of pollution downstream in the process creating more pollution down stream. I understand the people of Akwesasne would like it all to disappear, but their preferred solution doesn't make sense to me.

Bruce Smith MD

11-28-12

Dear Young Chang

Thank you for taking the time to read my words.

I want to express that as a human being, a woman, a mother of two young boys and a resident of Akwesasne, nothing less than the complete removal of all toxins and complete restoration of the Grasse River and surrounding habitat is acceptable in my ~~optator~~ opinion.

As caretakers of this earth, it is our responsibility to ensure that the future generations are left with a healthy & viable environment.

I believe the parties responsible for the extremely harmful & deadly pollution should bear the financial responsibility to restore the area to its historically pristine state. ~~that~~ ~~the~~ the Onkwehonwe, have cared for since the beginning of time.

Thank you,
Rachael Davidson
Rachael Davidson

I am requesting a response letter:
Rachael Davidson

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River. The proposed remedy is not a protective remedy nor is it a permanent remedy.

As a Mohawk, I have a responsibility to consider the effects of any actions for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for thousands of years. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantings and harvesting of those resources in and along the Grasse River. The proposed dredging and restoration of the near shore areas is the acceptable and appropriate measure for the Grasse River.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit. For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for traditional Mohawk uses the toxins must be removed.

It is essential to Mohawk-way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Lorna Thomas

I am requesting a response letter:

Name (print): Lorna Thomas

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Lara Skitchers

TARASKIDDERS

I am requesting a response letter:

Name (print):

U.S. FOIA Exemption 6 Redaction

Address:

City:

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

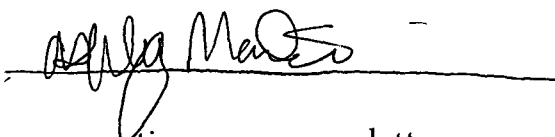
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Sken:nen,



I am requesting a response letter:

Name (print): Ashikah Mautkina

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

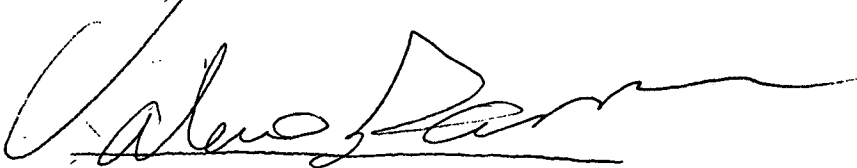
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Sken:nen,



I am requesting a response letter:

Name (print): U.A. Kene Gallow

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



I am requesting a response letter:

Name (print): Bernadine Books

Ad **U.S. FOIA Exemption 6 Redaction**
Cit **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



I am requesting a response letter:

Name (print): Scott Martin

Address

City

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Van Martin

I am requesting a response letter:

Name (print): Van Martin

Ad **U.S. FOIA Exemption 6 Redaction**
Cit

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Elizabeth Perkins

I am requesting a response letter:

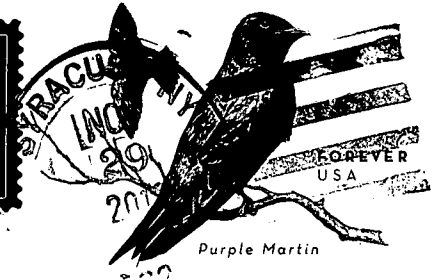
Name (print): Elizabeth Perkins

Address:
City:

U.S. FOIA Exemption 6 Redaction

Davidson

U.S. FOIA Exemption 6 Redaction



To: Young Chang
US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Craig Arquette

If you would like a response letter, please fill out the following information:

Name (print): CRAIG ARQUETTE

Add **U.S. FOIA Exemption 6 Redaction**

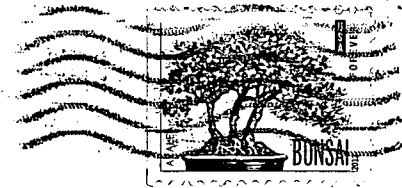
City

C. ARQUETTE

U.S. FOIA Exemption 6 Redaction

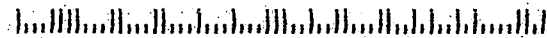
SYRACUSE NY 130

29 NOV 2012 PM 11



YOUNG CHANG
U.S. EPA
290 BROADWAY, 20th FLOOR
NEW YORK, NY 10007-1866

10007186699



November 29, 2012

Sharon Cree

U.S. FOIA Exemption 6 Redaction

RE: Grasse River Remediation

Remedial Project Manager Chang:

I write to express my strong support for a Grasse River cleanup plan that is based on sound science.

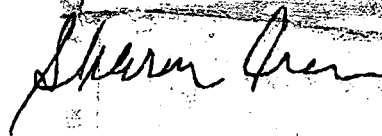
Fifteen years of scientific study shows a capping remedy is protective of human health and the environment, effective over the long term and complements the natural recovery already occurring in the river. The alternative recommended by EPA is also reasonable approach.

After nearly two decades of expert study and stakeholder input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

As an Alcoa employee, I can testify to the importance of the Grasse River and Alcoa's presence in this community. Alcoa is the largest employer in Massena. The company provides jobs for more than 1,100 hardworking men and women. The Grasse River remediation is important to everyone at Alcoa.

The community deserves a clean Grasse River. Alcoa deserves a cost-effective remedial plan that protects human health and the environment.

Sincerely:





Grasse River Remedial Plan - Massena, NY
Mogle-Besaw, Jane M. to: Young Chang

11/29/2012 10:27 AM

From: "Mogle-Besaw, Jane M." <Jane.Mogle-Besaw@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Young,

I attended the public meeting regarding the proposed remediation of the Grasse River in Massena, NY. Let me begin by telling you I was very impressed with your research, presentation and response to the public comment portion. When challenged by those in attendance, I thought you displayed professionalism and respect. You held your ground and did not falter. Very impressive given the circumstances.

Most importantly I want to affirm I am in support of the EPA's recommendation, Alternative #6. It is my understanding this solution, which includes capping, armored capping and some near-shore dredging, is protective of human health and the environment and will last and be stable over the long-term. We have been waiting for a solution for over 20 years. Now is the time to take action and begin the remediation process. We need to move forward.

I have lived in Massena for over 32 years. With the current economy the town is in a downward spiral. We need something to ignite a spark in the community and entice businesses to invest in Massena. I honestly believe the Modernization of Alcoa will be that spark!! The Modernization will provide a future for Massena.
More jobs... new businesses... new houses... more taxpayers. It is a win-win for everyone.

The Modernization will not be a possibility unless the Grasse River Remediation Solution is confirmed. Alcoa needs to know this financial piece before they can commit to Modernizing the plant. We need to move forward with this project.

Again, I support Alternative #6 as proposed by the EPA.

Thank you.

Jane Mogle-Besaw

U.S. FOIA Exemption 6 Redaction



Alternative #6
Oakes, Francis J to: Young Chang

11/29/2012 12:53 PM

From: "Oakes, Francis J" <Francis.Oakes@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Ms. Chang

I have a family member that live on the Hudson river, where they have dredged the river. Dredging a river just stirs up the contaminants and allow them to move all over the place. Having set in on meeting for the Grasse River, I feel the Alternative #6, which includes capping, armored capping and some near-shore dredging, is an acceptable solution.

Francis Oakes



Grasse River Remediation
Jarvis, Kevin G. to: Young Chang

11/29/2012 03:44 PM

From: "Jarvis, Kevin G." <Kevin.Jarvis@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

Dear Remedial Project Manager Chang,

As both an Alcoa employee and a resident of the Grasse River, we are writing to express our strong support for a Grasse River cleanup plan that is based on sound science.

Fifteen years of scientific study clearly shows a capping remedy is protective of human health and the environment. We believe this is the most effective approach over the long term and complements the natural recovery already occurring in the river. It is our opinion, that based on the scientific data, past history, and the unique configurations of the river that dredging is not the safest option and should only be utilized under very controlled circumstances. Therefore, we support the alternative recommended by the EPA as a reasonable approach.

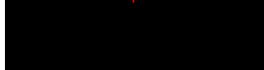
As someone who lives near this important waterway, the outcome of this process directly affects us and our family. After nearly two decades of study and input, the process must move forward so our community can begin experiencing the benefits of this remediation effort.

Our family deserves a clean Grasse River, the community deserves a clean Grasse River, and Alcoa deserves a cost effective remedial plan that protects human health and the environment. We trust that you will continue to move the process forward to implement the recommendations contained in the PRAP in as timely a manner as possible. Thank you for all of your efforts!

Sincerely,

Kevin & Tracy Jarvis

U.S. FOIA Exemption 6 Redaction





Grasse River Remediation -
Kesner, John E. to: Young Chang

11/29/2012 04:05 PM

From: "Kesner, John E." <John.Kesner@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

I want to communicate my support for the proposed remedial action plan for the Grasse River (Alternative 6).

I attended the Massena public comment meeting. I believe that the proposed plan is responsible in providing for protection of human health and the environment.

Moving forward with the proposed action plan is crucial to ALCOA in Massena, and local communities. Please, let's move forward expediently.

John E. Kesner

U.S. FOIA Exemption 6 Redaction





Grasse River
Bruce Smith to: Young Chang

11/29/2012 04:31 PM

From: Bruce Smith <[REDACTED]>
To: Young Chang/R2/USEPA/US@EPA

Dear Ms. Young, I believe the E P A's proposed cleanup of the Grasse River in Massena N.Y. to be the best option . I feel a major dredging of the 7 miles would stir up PCB's and send them downriver. I also think that the sooner the cleanup is done the better the river will be. This will be of benefit for Massena and her neighbors. Thank you for your excellent presentation at Massena High School. Sincerely,
Rosalie Smith



Grasse River Project Alcoa
Nancy Bogosian to: Young Chang

11/29/2012 05:19 PM

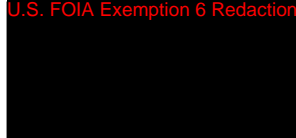
From: Nancy Bogosian U.S. FOIA Exemption 6 Redaction
To: Young Chang/R2/USEPA/US@EPA

My name is Nancy Bogosian, a homeowner in Massena, NY. It is my opinion, regarding the Grasse River EPA project that alternatives 3,4,5 or 6 would be the best options for our river versus the full dredging of the river, which would cause too many PCBs to be stirred.

Thank you for the opportunity to express my thoughts.

Nancy Bogosian

U.S. FOIA Exemption 6 Redaction



Jerry & Darcie Fregoe

U.S. FOIA Exemption 6 Redaction

November 29, 2012

Ms. Young S. Chang
Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Dear Ms. Chang:

Both of us have lived near and played on the Grasse River for our entire lives. I was raised in Louisville. My family owned property on the Grasse, upstream of the Rt 37 bridge and my wife grew up on a river property downstream from the Route 131 bridge. We currently own a 17 acre parcel along the river off of Trippany road. Along with our two teenage sons, we canoe, fish and snowmobile on the river. We have cut trails and utilize the property for hunting, four-wheeling and taking a walk in along the riverbank. I also have harvested a few of the mighty red oaks that grow within a couple hundred feet of the river.

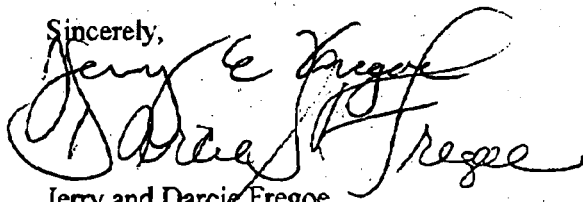
After reviewing the Grasse River website along with the multiple remedial options considered, we are writing to express our full support for option # 3 as proposed by the EPA.

I understand that some in the North Country have voiced concern and expressed an interest in seeing more extensive dredging. After working for a civil contractor for many years, some of which involved projects with excavators and cranes on barges, I am well aware of the difficulties and risk involved in this work. It is difficult to do any work in the river without creating turbidity. Certainly, the capping process will provide far less downstream disturbance than the options that include more extensive dredging. Project duration will certainly limit our use of the river and at 4 years, option #3 is going to be a significant disturbance to our waterfront as well as result in congestion of large trucks and equipment on our roads. The other options with durations up to 17 years are completely unacceptable. The Massena area has been waiting for the conclusion of this project for 20 years. Sampling, testing, scientific studies and various pilot projects have been completed, the EPA has made their recommendation and Alcoa has stated that they will agree to this option.

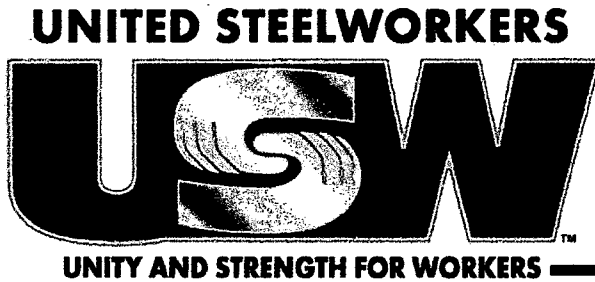
We urge you to stick with the decision you have made and expedite the engineering of this project, in hopes of getting it done as soon as possible, so the river can heal from this process.

I am looking forward to seeing progress on this project.

Sincerely,



Jerry and Darcie Fregoe



Local 450-A
David W. LaClair, Jr. - President
Erwin E. Zahler, Jr. - Vice President

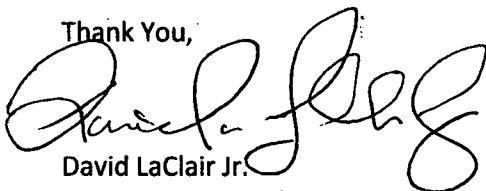
November 29, 2012

Ms. Young S. Chang, Remedial Project Engineer
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Ms. Young S. Chang,

My name is David LaClair Jr. I am the President of United Steel Workers local 450-A. I represent the hourly workforce for the Massena Alcoa East plant. I am writing this to let you know that we as a membership support the option #6 that you have chose for the Grasse river remediation. We feel out of all the options presented this one best defines what needs to be done. We also request that the final decision be expedited, as it has great value on the future of our facility and the workforce here In the North Country. With that being said we also believe that the decision should be tied into whether Alcoa invests here for the future. Here in Massena we have watched what happened to the GM facility that was located here. We feel that Alcoa needs to make a long term commitment to receive this benefit from the EPA.

Thank You,



David LaClair Jr.

President

USW Local 450-A

United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International
Union

24 Woodlawn Avenue, Massena, NY 13662 Tel: (315) 769-7510 Fax: (315)769-7554

e-mail - usw450@centralny.twcbc.com



Public comment letter

Jacob Terrance

to:

Young Chang, Pietro Mannino

11/29/2012 09:42 AM

Cc:

"Larry McShea", "Ken Jock", onesnipe

Hide Details

From: "Jacob Terrance" <jacob.terrance@srmt-nsn.gov>

To: Young Chang/R2/USEPA/US@EPA, Pietro Mannino/R2/USEPA/US@EPA

Cc: "Larry McShea" <Larry.McShea@alcoa.com>, "Ken Jock" <ken.jock@srmt-nsn.gov>, <onesnipe@sympatico.ca>

1 Attachment



USEPA ALCOA.pdf.pdf

Young and Pete,

I received an email from a community member with a signed letter containing his comments of the Grasse River clean up proposal.

Jacob Terrance

Alcoa Superfund Oversight Specialist

(P): 518-358-5937 ext 135

(F): 518-358-6252

St. Regis Mohawk Tribe Environment Division

412 State Route 37

Akwesasne, NY 13655

Saint Regis Mohawk Tribe

412 State Route 37

Akwesasne NY, 13655

Att ; Mr. Jacob Terrance

Please Forward to the appropriate persons at USEPA and ALCOA.

Re :USEPA Grasse River Proposed Remediation

I am writing to express my concerns and strongly oppose the proposed remediation plan as suggested by the USEPA and the desired by the grossly negligent company known as ALCOA.

I have been a lifelong resident of Akwesasne all my life except for the time away as a US Marine. In my life time have witnessed first hand the disaster upon Akawseasne as brought to us by the many industries and companies surrounding around our community, in this case ALCOA, the former Reynolds and General Motors plants. I have seen first- hand the hurt and anguish of a loved one passing on to the creator due to Cancer. Many times over, way too many times!

I do not understand nor can I comprehend how the United States Environmental Protection Agency can even suggest this proposed remedial action plan as the solution to the problem. It is a solution to their negligent behavior and supposed oversight that they claim to have had over the Environment from the day these industries arrived to terrorize our people.

In no way should we accept the proposed cap that 'in dream land' is supposed to protect our people against this silent killer. I am not a scientist, nor an expert on PCB's, but you don't need to be an expert to know PCB's kill, cancer kills, and negligence in knowing and not doing what is right is still negligence. Someone is responsible, someone should pay! My person experience's in the community relate to drinking water and communal drinking water system. We spend MILLIONS AND MILLIONS of dollars installing water treatment system to try and make our potable water systems safe for our residents.

JST
11-28-12

We need many more millions to make our water safer if this cap is allowed to go on. From what I recall, not even the best known technologies in Nano filtration will take PCB's out of the water system. 'Deleterious substances kill fish, we eat fish, we will eventually die'. Sounds like that is what the USEPA and ALCOA desire. With the ever changing environment, I feel it is of the utmost concern that leaving a Super Fund Clean-up site left in place when they know it can be removed and effectively addressed once and for all is the only SOLUTION, there are no other options.

I understand the Scientists from the EPA suggested that a woman's breast milk with a certain level of PCB's in it is normal. When was it ever normal to have PCB's in breast milk? When was it normal to have PCB's in the human body? I have heard jobs are at risk, what about the lives of our people? My father died of cancer, as did many of his co-workers and friends. Yes He worked at ALCOA and Reynolds and GM as an Iron Worker. We will never know how he got Cancer, We know he died, We know we miss him, We know we loved him, We know he never got to see the next generations of our family. I wonder if the scientist can relate to that. It's called Cancer and it is at our door step.

I am extremely distrustful of the USEPA, ALCOA and anyone who would suggest it is Ok to leave this disaster laying at our door step for our community to live with forever. If they are certain things will be fine then, I would cordially invite every last one of them to leave where ever they live, and come and build along the banks of the Grasse River, (down-stream of course) with their entire family, all their friends and relatives. I will be the first to greet them.

Respectfully submitted,



Joe Francis

Akwesasne Mohawk Nation

11-2872



Signed Letters
Jacob Terrance

to:

Young Chang

11/29/2012 02:46 PM

Cc:

"Ken Jock", Pietro Mannino

Hide Details

From: "Jacob Terrance" <jacob.terrance@srmt-nsn.gov>

To: Young Chang/R2/USEPA/US@EPA

Cc: "Ken Jock" <ken.jock@srmt-nsn.gov>, Pietro Mannino/R2/USEPA/US@EPA

1 Attachment



Signed Letters (56 total).pdf

Young,

Attached to this email is the scanned entry of some more public comment letters that have just come into my possession. I fear that the file may be too big. Please let me know if you have any problems opening or viewing it. Thank you.

Jacob Terrance
Alcoa Superfund Oversight Specialist
(P): 518-358-5937 ext 135
(F): 518-358-6252
St. Regis Mohawk Tribe Environment Division
412 State Route 37
Akwesasne, NY 13655

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

She:kon Young Chang,

This letter is to express my concerns with the Proposed Remedial Plan for the Grasse River.

The proposed remedy is not protective nor is it a permanent remedy. As a Mohawk, I have a responsibility to consider the effects of any actions taken for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for generations. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantation and harvesting resources in and along the Grasse River.

The proposed dredging and restoration of the near shore areas is an acceptable and appropriate measure for the Grasse River.

For long term protection of Mohawk resources, main channel dredging must be included in any remedial action. Relying solely on an armored cap/sand cap is not sufficient for protection against erosion. By leaving toxins in place there is still a health impact to Mohawk people and its resources. In order to restore the river for Mohawk uses all toxins must be removed.

Alcoa conducted dredging in 1914-1918 of the lower Grasse River/Indian Meadows for their economic benefit and dredging now would be to the public's benefit.

It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Signature:

Print Name:

Address:

Richard M. [Signature]

Date:

Richard M. [Signature]

U.S. FOIA Exemption 6 Redaction

[Redacted Address]

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov

Fax: (212)637-3966

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Sken:nen,

Signature:

Louise Ingle

Date: 11-10-12

Print Name:

Louise Ingle

Address:

U.S. FOIA Exemption 6 Redaction

[Redacted Address]

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Signature: _____
Print Name: _____
Address: _____

Bela Hill
Bela Hill
U.S. FOIA Exemption 6 Redaction
[Redacted]

Date: 11-02-12

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Fax: (212)637-3966

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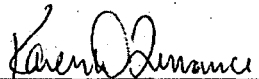

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Sken:nen,

Signature: 
Print Name: KAREN D. TERRENCE
Address: U.S. FOIA Exemption 6 Redaction


Date: 11/17/12

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature:
Print Name:
Address:

Loretta Benedict
LORETTA BENEDICT

Date: 11.13.12

U.S. FOIA Exemption 6 Redaction

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U.S. Environmental Protection Agency
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Sken:nen,

Signature:  Date: 11-13-12
Print Name: Colleen Coe
Address: 
U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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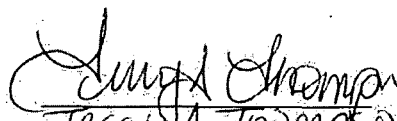
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Sken:nen,

Signature:
Print Name:
Address:

 Date: 11/13/12

Terry A. Thompson
U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
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290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Signature:
Print Name:
Address:

Michelle Hogg
Michelle Hogg

Date: 11-13-12

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

She:kon Young Chang,

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Sken:nen,

Signature:

Eddie Gray

Date: 11-13-12

Print Name:

Eddie Gray

Address:

U.S. FOIA Exemption 6 Redaction

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Sken:nen,

Signature:

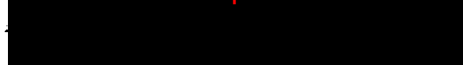
Noah Rawson Jr. Date: *11/14/12*

Print Name:

NOAH RAWSON JR

Address:

U.S. FOIA Exemption 6 Redaction



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New York, NY 10007-1866

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Sken:nen,

Signature:

Print Name:

Address:

Linda Jackson Date: *11-14-12*
Linda Jackson

U.S. FOIA Exemption 6 Redaction

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New York, NY 10007-1866

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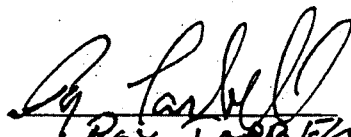
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Sken:nen,

Signature:
Print Name:
Address:


Date: 11-14-12
Roy Labien
U.S. FOIA Exemption 6 Redaction

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New York, NY 10007-1866

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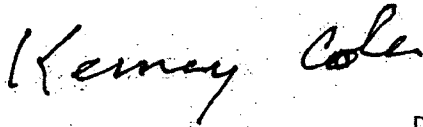
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Signature: _____

Print Name: _____

Address: _____

Date: 11/14/12

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Sken:nen,

Signature:
Print Name:
Address:

Richard Oakes
Richard Oakes
U.S. FOIA Exemption 6 Redaction
[Redacted Address]

Date: 11/14/12

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290 Broadway, 20th Floor
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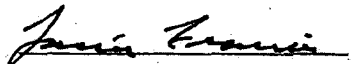
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Sken:nen,

Signature:



Date: 11-19-12

Print Name:

LANCE FRANCIS

Address:

Young S. Chang, Remedial Project Manager
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290 Broadway, 20th Floor
New York, NY 10007-1866

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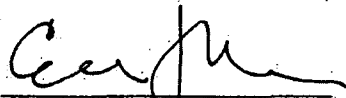
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Sken:nen,

Signature:

Print Name:

Address:



Date: 11/14/12

Erin Jacobs

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Fax: (212)637-3966

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Sken:nen,

Signature: Valene Gray Date: 11/14/12
Print Name: Valene Gray
Address: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Signature:
Print Name:
Address:

Ken Mitchell
Ken Mitchell
U.S. FOIA Exemption 6 Redaction

Date: Nov. 14, 2002

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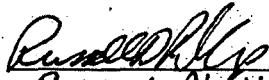
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Sken:nen,

Signature:

Print Name:

Address:


Russell Phillips

Date:

11-14-12

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Sken:nen,

Signature:
Print Name:
Address:

Julia David
JULIA DAVID
AKWESASNE

Date: 11/5/12

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New York, NY 10007-1866

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Sken:nen,

Signature: Shirley Jacob Date: NOV 15
Print Name: SHIRLEY JACOB
Address: ST REGIS QUE

Young S. Chang, Remedial Project Manager
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New York, NY 10007-1866

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Sken:nën,

Signature:
Print Name:
Address:

Julianne Barnes
Julianne Barnes

Date: *11-15-12*

U.S. FOIA Exemption 6 Redaction

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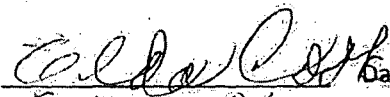

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Sken:nen,

Signature:
Print Name:
Address:

 Date: 11-7-12
EIDA COOK
U.S. FOIA Exemption 6 Redaction


Young S. Chang, Remedial Project Manager
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New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature: Rose Marie Jacobs Date: 11-15-2012
Print Name: ROSE MARIE JACOBS
Address: AKWESASNE

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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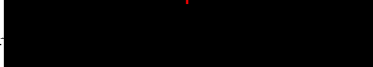
Sken:nen,

Signature:
Print Name:
Address:

James N. Reardon
James N. Reardon

Date: 11/15/12

U.S. FOIA Exemption 6 Redaction



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Sken:nen,

Signature:

Linda Holmes

Date:

Nov. 15, '12

Print Name:

Linda Holmes

Address:

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Sken:nen,

Signature:
Print Name:
Address:

Joahn Bigtree Date: 11-15-12

JOHN BIGTREE

U.S. FOIA Exemption 6 Redaction

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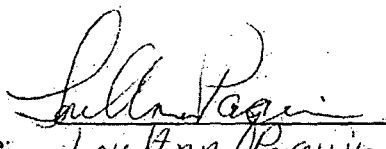
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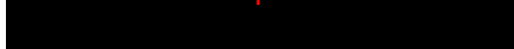
11/15/12

Print Name:

Lou Ann Pagan

Address:

U.S. FOIA Exemption 6 Redaction



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Sken:nen,

Signature:
Print Name:
Address:

Elaine Cook Date: 11-15-12
Elaine COOK

U.S. FOIA Exemption 6 Redaction

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Sken:nen,

Signature:
Print Name:
Address:


GRACE CHUBB
U.S. FOIA Exemption 6 Redaction


Date: 11-15-12

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Sken:nen,

Signature:
Print Name:
Address:

Yvonne Chubb Date: 11-15-12
Yvonne Chubb
U.S. FOIA Exemption 6 Redaction

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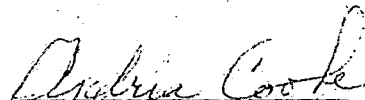
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Sken:nen,

Signature:

Print Name:

Address:


Audria Cooke

Date: 11-15-12

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Signature:
Print Name:
Address:

May Cole

Date: 12-15-02

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Signature:



Date: 11-15-2012

Print Name:

Cynthia Carberry

Address:

Akwesasne NY

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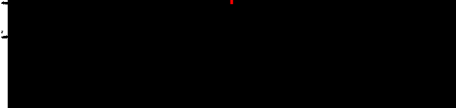
Alice McClure Date: *11/14/12*

Print Name:

ALICE McClure

Address:

U.S. FOIA Exemption 6 Redaction



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Signature:

Print Name:

Address:

Laura Cree
LAURA CREE

Date: _____

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Signature:
Print Name:
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Wilford Sitawa Date: *11/15/12*
WILFORD SITAWA

U.S. FOIA Exemption 6 Redaction

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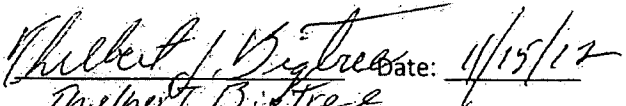

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Sken:nen,

Signature:  Date: 4/15/12
Print Name: Gilbert Bittrese
Address: 

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Sken:nen,

Signature: Sylvia Pearson
Print Name: SYLVIA PEARSON
Address: U.S. FOIA Exemption 6 Redaction

Date: 12/15/12

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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Sken:nen,

Signature:
Print Name:
Address:

Ludwig B. BEESON date: 11/15/12
LUDWIG B. BEESON

U.S. FOIA Exemption 6 Redaction

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Sken:nen,

Signature: Mabel White

Date: 11-15-12

Print Name: Mabel White

Address:

U.S. FOIA Exemption 6 Redaction

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U.S. Environmental Protection Agency
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New York, NY 10007-1866

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Sken:nen,

Signature:

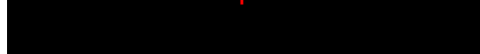
Lora Leela France Date: 11/15/12

Print Name:

Lora Leela France

Address:

U.S. FOIA Exemption 6 Redaction



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New York, NY 10007-1866

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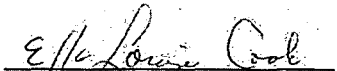
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Sken:nen,

Signature:
Print Name:
Address:


Ella Louise Cook

Date: Nov 15, 2012

U.S. FOIA Exemption 6 Redaction


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Sken:nen,

Signature:
Print Name:
Address:

Linda Dean
LINDA DEAN

Date: 11-17-12

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Signature:

Print Name:

Address:


Phyllis Hamelin

Date:

11-15-12

U.S. FOIA Exemption 6 Redaction

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New York, NY 10007-1866

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Sken:nen,

Signature:
Print Name:
Address:

Maxine Cole
Maxine Cole

Date: November 15, 2012

U.S. FOIA Exemption 6 Redaction

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U.S. Environmental Protection Agency
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New York, NY 10007-1866

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Sken:nen,

Signature: Elizabeth G. Russell
Print Name: Elizabeth G. Russell
Address: U.S. FOIA Exemption 6 Redaction

Date: 11-15-12

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Sken:nen,

Signature:
Print Name:
Address:

Beatrice Helwhite Date: *11-15-12*

Beatrice Helwhite
U.S. FOIA Exemption 6 Redaction

Young, S. Chang, Remedial Project Manager
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290 Broadway, 20th Floor
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Sken:nen,

Signature:
Print Name:
Address:

Catherine Cook
CATHERINE COOK

Date: 11/15/12

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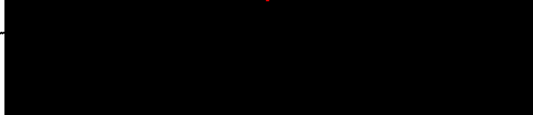
Sken:nen,

Signature:
Print Name:
Address:

Benjamin Kelly Date: *11-15-12*

BENJAMIN KELLY

U.S. FOIA Exemption 6 Redaction



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Signature: Helen Sherwood Date: 11/15/12
Print Name: Helen Sherwood
Address: U.S. FOIA Exemption 6 Redaction



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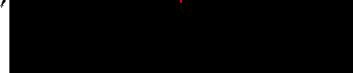
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Sken:nen,

Signature:
Print Name:
Address:

Nessa Sherwood Date: 11/15/73

U.S. FOIA Exemption 6 Redaction



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Sken:nen,

Signature:

Print Name:

Address:

Elizabeth Kelly
Elizabeth Kelly

Date: 11-15-20

U.S. FOIA Exemption 6 Redaction

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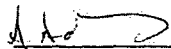

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Sken:nen,

Signature: _____
Print Name: _____
Address: _____


Amanda Adams
U.S. FOIA Exemption 6 Redaction


Date: 11/15/12

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The proposed remedy is not protective nor is it a permanent remedy. As a Mohawk, I have a responsibility to consider the effects of any actions taken for the next seven generations. The extreme amount of contamination in the Grasse River has severed Akwesasne from traditional resource uses that are the most important aspect of the Mohawk way of life. I am unable to provide my family with fish, mammals, waterfowl and medicines from the river that we have depended on for generations. As a Haudenosaunee/Mohawk community member I have the right to use the fisheries, medicines, hunting, plantation and harvesting resources in and along the Grasse River.

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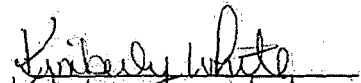
It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,

Signature:

Print Name:

Address:


Kimberly White

Date: 11/15/12

Young, S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

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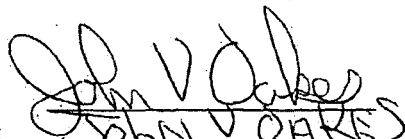
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Sken:nen,

Signature:

Print Name:

Address:


JOHN V OAKES

Date:

11-15-12

U.S. FOIA Exemption 6 Redaction

[Redacted Address]

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

I am requesting a response letter:

Name (print): John Arquette

Address: **U.S. FOIA Exemption 6 Redaction**
City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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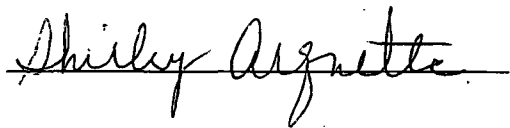
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Sken:nen,



I am requesting a response letter:

Name (print): Shirley Arquette
Address: U.S. FOIA Exemption 6 Redaction
City: [Redacted] ZIP Code: _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



I am requesting a response letter:

Name (print): Steven J. Arquette

Address: **U.S. FOIA Exemption 6 Redaction**

City: _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Donna Benedict

If you would like a response letter, please fill out the following information:

Name (print): Donna m Benedict

Addr

U.S. FOIA Exemption 6 Redaction

City:

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

I am requesting a response letter:

Name (print): MARY CATALANO

Address: U.S. FOIA Exemption 6 Redaction

City: U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

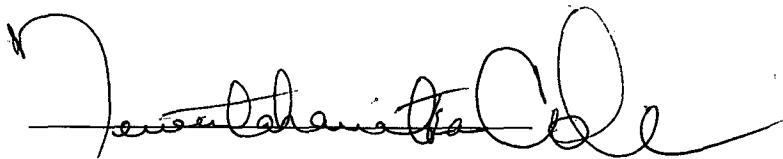
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Sken:nen,



I am requesting a response letter:

Name (print): Tewentahawih'tha' Cole

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



Address:
U.S. FOIA Exemption 6 Redaction

I am requesting a response letter:

Name (print): Crystal Cree

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

U.S. FOIA Exemption 6 Redaction



I am requesting a response letter:

Name (print): FRANK Cree

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Brian David

I am requesting a response letter:

Name (print): Brian David

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

If you would like a response letter, please fill out the following information:

Name (print): SCOTT DESHANE

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): Andrew A. Herne

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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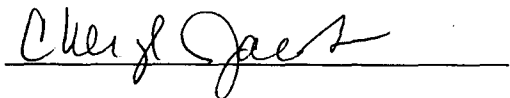
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Sken:nen,



I am requesting a response letter:

Name (print): Cheryl Jacobs

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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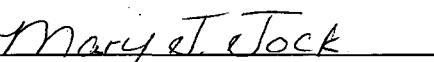
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If you would like a response letter, please fill out the following information:

Name (print): 

Address

U.S. FOIA Exemption 6 Redaction

City

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,



If you would like a response letter, please fill out the following information:

Name (print): Mary LaFrance

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

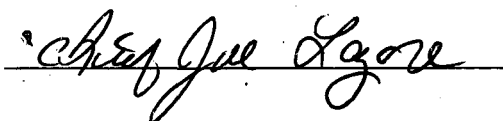
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It is essential to Mohawk way of life that EPA instruct Alcoa to expend whatever moneys and take whatever measures necessary to remediate and restore the health of the Grasse River, the land, the animals, the plants and thus, the people.

Sken:nen,



I am requesting a response letter:

Name (print): JOE LAZORE

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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Sken:nen,

Orlo W Ransom

U.S. FOIA Exemption 6 Redaction



I am requesting a response letter:

Name (print): ORLO W RANSOM

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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Sken:nen,

Theresa L Seymour

If you would like a response letter, please fill out the following information:

Name (print): Theresa L Seymour

Add

U.S. FOIA Exemption 6 Redaction

City

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

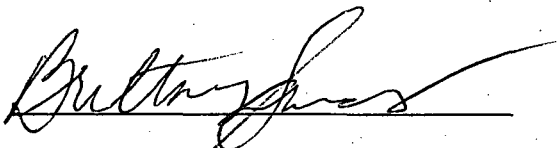
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Sken:nen,



I am requesting a response letter:

Name (print): Brittney Skidders

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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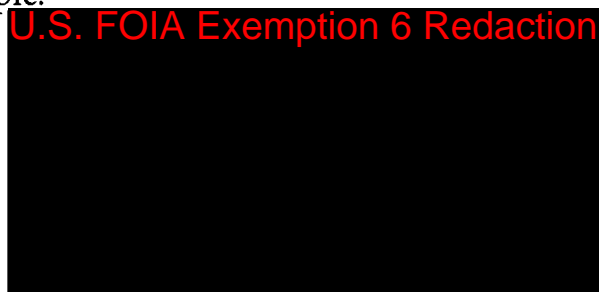
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Sken:nen,

U.S. FOIA Exemption 6 Redaction



I am requesting a response letter:

Name (print): Matthew Skidders

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Former Chief

Hilda E Smoke

I am requesting a response letter:

Name (print): HILDA E Smoke

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

If you would like a response letter, please fill out the following information:

Name (print): *Sarah Square*

Add **U.S. FOIA Exemption 6 Redaction**

City

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

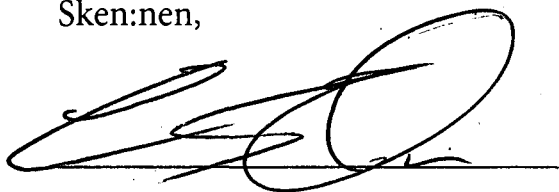
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Sken:nen,



I am requesting a response letter:

Name (print): Eric Thompson

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

Marlene Thompson

If you would like a response letter, please fill out the following information:

Name (print): _____

Address: _____

City: _____ State: _____ ZIP Code: _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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Sken:nen,

I am requesting a response letter:

Name (print): PAUL THOMPSON

U.S. FOIA Exemption 6 Redaction

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

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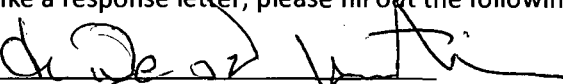
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Sken:nen,

If you would like a response letter, please fill out the following information:

Name (print):



Add

U.S. FOIA Exemption 6 Redaction

City

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

Dear Young Chang,

I, _____ (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Fill out the information below if you wish to receive a reply notice.

(Name) _____

Velma J. Cook

(Address) _____

U.S. FOIA Exemption 6 Redaction

(City) _____

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov

Fax: (212)637-3966

Dear Young Chang,

I, Audrey Diabo (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Audrey Diabo

Fill out the information below if you wish to receive a reply notice.

(Name) Audrey Diabo

(Address)

U.S. FOIA Exemption 6 Redaction

(City)

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

Dear Young Chang,

I, Tracy Gray (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Tracy Gray

Fill out the information below if you wish to receive a reply notice.

(Name) Tracy Gray

(Address) **U.S. FOIA Exemption 6 Redaction**

(City) **U.S. FOIA Exemption 6 Redaction**

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

Email: Chang.Young@epa.gov
Fax: (212)637-3966

Dear Young Chang,

I, Ashley Mitchell (full name) wish to express my concerns and comments about the remedial alternative selection in regards to the USEPA Grasse River PRAP decision. I have concluded that the proposed plan lacks environmental/human health protection and permanence. Although there is dredging along the near shore, I feel that more main channel dredging would help to promote environmental/human health while decreasing the amount of polychlorinated biphenyls left behind in the river. I also feel that the use of a regular cap in the main channel will not stand the test of time. The Grasse River has a history of ice scouring and a single ice event has the potential to devastate the sediment capping layer.

In conclusion, please consider more main channel dredging as a more protective and permanent alternative to remediate the Grasse River.

Sincerely,

Ashley Mitchell

Fill out the information below if you wish to receive a reply notice.

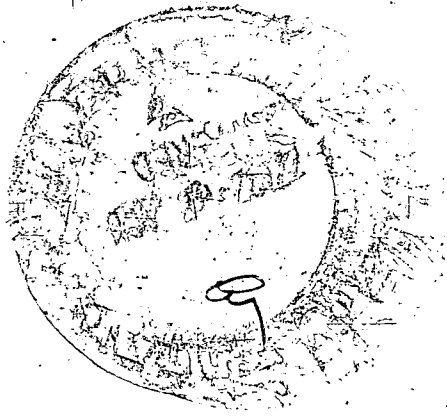
(Name) Ashley Mitchell

(Address) **U.S. FOIA Exemption 6 Redaction**

(City) **U.S. FOIA Exemption 6 Redaction**

EXPRESS

Express



Theresa Seymour
SRMT ENVIRONMENT DIVISION
449 Frogtown Road

HOGANSBURG, NY 13655



ActWgt: 1.0 LB
CAD: 1446026/INET3300

Delivery Address Bar Code



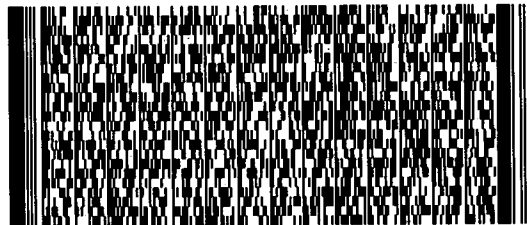
SHIP TO: (212) 637-4253
Young Chang
USEPA
ERRDNRYB
290 Broadway, 20TH Floor
New York, NY 10007

BILL THIRD PARTY

Ref # ALCOA Oversight
Invoice #
PO #
Dept #

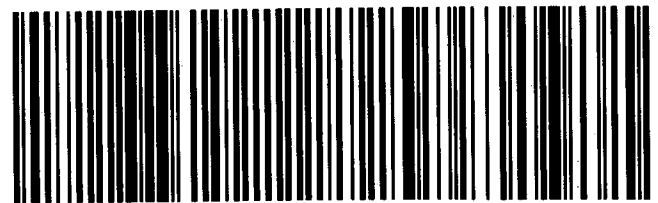
THU - 29 NOV A1
PRIORITY OVERNIGHT

TRK# 7941 6973 5697
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EA PCTA

10007
NY-US
EWR



515G3/EE3B/AA44

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line

Young S. Chang, Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

She:kon Young Chang,

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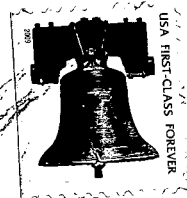
Sken:nen,

I am requesting a response letter:

Name (print): Elizabeth Cook

Address: **U.S. FOIA Exemption 6 Redaction**

City: **U.S. FOIA Exemption 6 Redaction**



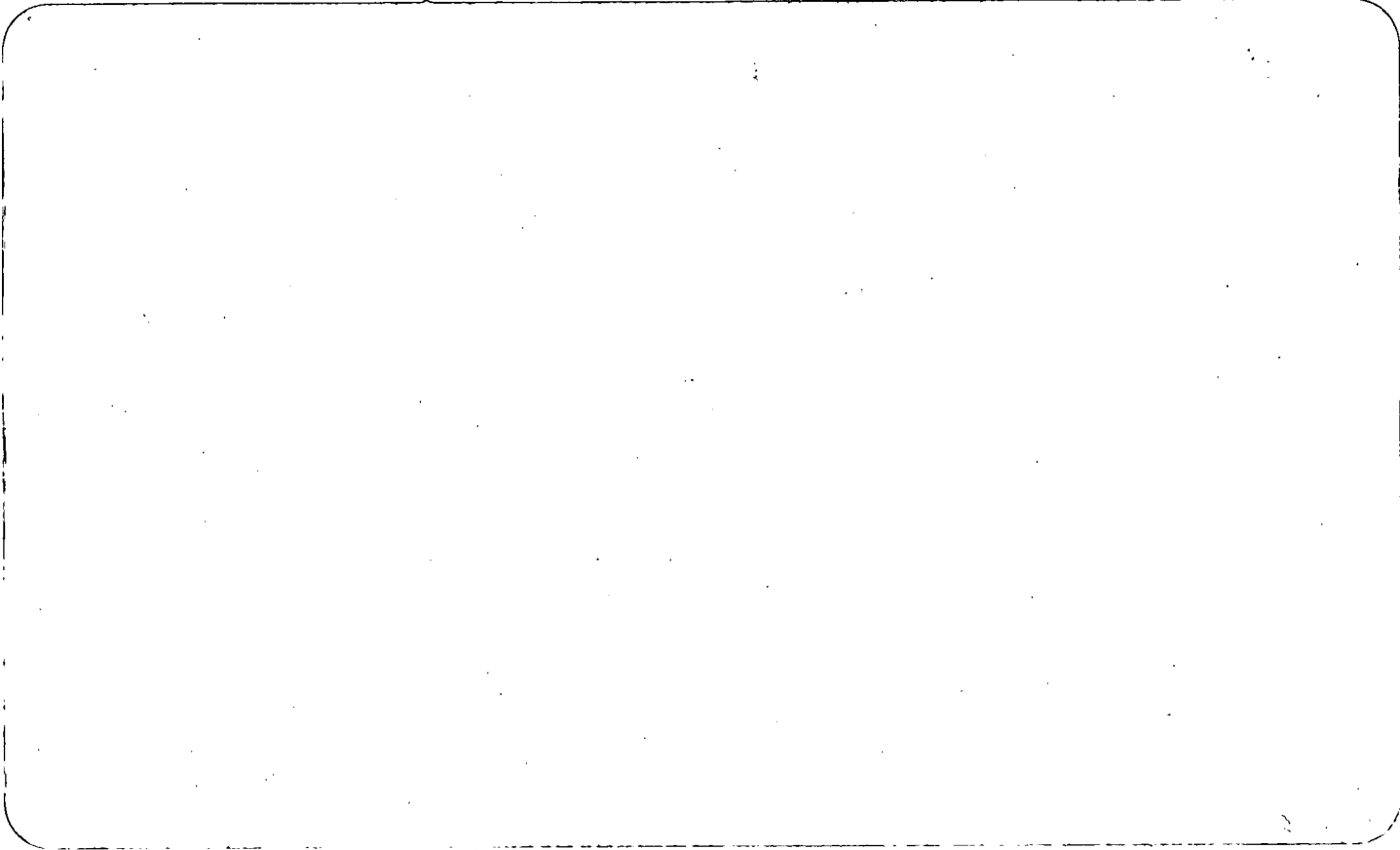
Young, S. Chang Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th floor
New York, N. Y. 10007-1866



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MP DATES

**APPENDIX II – b: COPIES OF COMMENT LETTERS SUBMITTED
AFTER THE COMMENT PERIOD ENDED**

The copies of the comment letters received after the comment period ended are provided as a separate attachment to this Record of Decision.

EPA in its discretion has decided to respond to them (to the extent that the comments aren't already addressed in other comment responses) despite the fact that they were submitted after the comment period closed.



grasse river project
Verville, Donald J. to: Young Chang

11/30/2012 12:00 AM

From: "Verville, Donald J." <Donald.Verville@alcoa.com>
To: Young Chang/R2/USEPA/US@EPA

History: This message has been forwarded.

I was born in Massena and have lived here all my life. My grandfather, father and myself have a combined of nearly 100 years. Of course I would want to see Alcoa Aluminum continue on here for years to come. At the same time save the river and down river of a contamination.

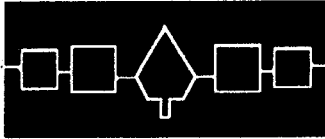
I really do believe that if left alone and recapped will be the best overall program with some capping recommended by the DEC.

Sincerely,
Don Verville

U.S. FOIA Exemption 6 Redaction

160793





HAUDENOSAUNEE

Mohawk • Oneida • Onondaga • Cayuga • Seneca • Tuscarora

Environmental Task Force
VIA: PO Box 992
Hogansburg, NY 13655

Tel: (518) 358-4286
www.hetf.org

November 19, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

RE: EPA Proposed Remedial Plan for the Grasse River

Watkwanonwaraton:

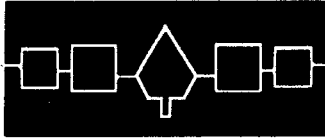
In 1992, the Haudenosaunee sent a delegation to the United Nations Earth Summit in Rio de Janeiro, Brazil to spread the words of the Thanksgiving Address, the philosophy of our people. This delegation reminded the entire world that we have a responsibility to act as caretakers of the natural world. At the Rio Summit, world leaders finally made a commitment to protect the global environment. The UN drafted Agenda 21, Chapter 26, which recognized that Indigenous peoples have control over natural resources in their own territories and have the right to set policies to protect these resources. The Haudenosaunee, with the support of the UN, developed a comprehensive plan to protect the natural world using our holistic traditional knowledge.

The Haudenosaunee Nations came together to form an organization called the Haudenosaunee Environmental Task Force (HETF) whose work was sanctioned by the Grand Council of the Haudenosaunee. Collectively, a plan was developed to correct problems that were identified in a document called *Haudenosaunee Environmental Restoration: An Indigenous Strategy for Human Sustainability*.

In July of 1995, HETF presented the Haudenosaunee Restoration Plan to the United Nations at the Summit of the Elders. A precedent was set. The environmental strategy of the Haudenosaunee is among the first comprehensive responses to Agenda 21, Chapter 26, and marks the beginning of the International Decade for Indigenous Peoples.

The mission of the HETF is to assist Haudenosaunee Nations in their efforts to conserve, preserve, protect and restore their environmental, natural and cultural resources; to promote the health and survival of the sacred web of life for future generations; to support other Indigenous Nations working on environmental issues; and to fulfill our responsibilities to the natural world as our Creator instructed without jeopardizing peace, sovereignty, or treaty obligations. However, as Indigenous Nations, we realize that all things are interconnected and do not wish to limit our activities to those listed above.





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TREATIES

Treaties are the highest form of agreement between nations. Those agreements are considered Treaties under international law. Treaties exist between the Haudenosaunee and the United States of America and Great Britain. The early formal relationships recognized the Haudenosaunee and the United States of America as sovereign nations. As a result, the U.S. Federal, State, County and private U.S. citizens have a responsibility to respect the terms of the treaties. Sovereignty, jurisdiction and cultural lifestyles must also be respected. Haudenosaunee hunting, fishing and gathering rights were never ceded with treaties made with the United States. Treaties between nations also carry a great responsibility.

Hiawatha Belt – Common Lands Belt

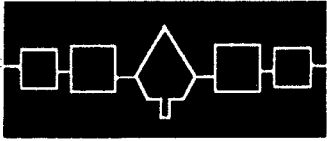
In terms of natural resource management, the Haudenosaunee demonstrate the concepts of consensus decision-making and collective rights by making the Hiawatha treaty between the Indigenous Nations that inhabited Turtle Island (North America) before the Europeans came over and landed on this Island. This belt represents that all of this land and all its natural resources were not put on mother earth for our purpose, but were put here by the Creator for the future generations. It is our responsibility to work together in unity to make sure these natural resources continue for the future generations to come.

The land, water, air, plant and animal life, *etc.*, were put upon Mother Earth for all people to access based on the needs for their survival. Creation will provide for the basic needs of man as long as man treats Creation using a good mind. Collective entitlement to natural resources would be maintained. All of the resources of nature would be shared commonly to ensure survival. In conjunction with the *Kaienerekowa*, or “Great Law of Peace”, the Haudenosaunee are to apply the One Dish, One Spoon Principle to all of Creation by utilizing the Three Principles of Good mindedness, Peacefulness, and Strength, to ensure that all of Creation continues to flourish. Today, this translates to environmental protection and conservation by all members of the Confederacy.

Kaswentha - Two Row Wampum

When the Haudenosaunee first came into contact with the European Nations in the early 1600’s, they realized that it was not possible to bring these Nations (the Dutch, French, English, and later American) inside the Circle. Therefore a treaty of friendship and peace was made with each European Nation respectively. Each of these agreements is symbolized by the *Kaswentha*, or “Two Row Wampum”. It describes how two different peoples relate to each other and how they can coexist with one another in a way of peace.

Probably the first time the Two Row Wampum agreement was made with a European power was with the Dutch. Symbolically, there was a river flowing called the River of Life. In that River of Life it was agreed that the Haudenosaunee were to keep our laws, our ways of government, our traditions and beliefs.



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These paths were intentionally paralleled, to indicate the agreed understanding that the two vessels are to help each other from time to time, while neither was to interfere in the internal affairs or governance of the other. While of late the separation of the governments and laws has been stressed, the three rows of white wampum between the paths denote respect, friendship and trust, principles which keep the two vessels close as well as at a respectful distance.

The River of Life is an apt symbol of the nature of Haudenosaunee treaty relations. While other peoples may view treaties as individual transactions, the Haudenosaunee see them in the context of the relationship they have with the other Nation: if the relationship is the river, the treaties are stones that mark spots along its way. The principles of the Two Row Wampum became the basis for all treaties and agreements that were made afterwards with the French, the English and later the Americans.

Silver Covenant Chain

The Silver Covenant Chain is a unique Haudenosaunee-European political tool that changed the face of North America. Beyond the seemingly perpetual conflict of Native American-white relations was an idea of peace between the colonist and the Haudenosaunee that was manifested for over two centuries in the Silver Covenant Chain of Peace.

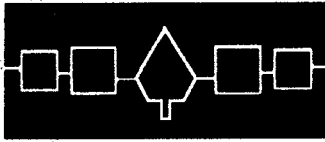
The Covenant Chain was more than a symbolic reference to the making of peaceful relations. It was also the actual confederation of Native nations and their allies, tied together with English colonies. To the Haudenosaunee, the Covenant Chain was the means by they could attach themselves to other Native American nations who were not in their confederacy, as well as the European colonists. The Covenant Chain was also a way to wipe the slate clean should there be transgressions.

The Covenant Chain of Peace, itself a metaphor for the preferred treaty relationship, is based upon the older metaphor of men linking arms as a show of peace. The links of a chain reminded the old timers of this linking of arms to show solidarity and peacefulness. A renewal of the commitments of a treaty agreement therefore became known as "polishing the chain" to remove any rust or dirt (metaphors for bad conduct) as a way of renewing the terms and spirit of the agreement.

There were said to be three links to the original chain, representing the concepts of peace, friendship, and unity. The Haudenosaunee believe that the Covenant Chain is an idea of a path that connects the two nations, a path that promotes peace, meaning that they are free to travel to each other to talk, for help and support.

Treaty of Canandaigua of 1794

The Treaty of Canandaigua is legally a part of the supreme law of the land as guaranteed by the United States Constitution. This treaty was negotiated by two independent sovereign governments, the Haudenosaunee and



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the United States. Each side agreed to declare boundaries specifically set forth in the treaty. Each side agreed to guarantee the free use of and enjoyment by each government of its own lands, without interference from the other. Each side agreed to that the common goal would be peace and friendship between the two parties.

The Treaty of Canandaigua was a treaty of accommodation, born of military and political necessity on both sides. Because the Haudenosaunee at the time were too powerful a force to be subjugated by the fledgling United States government, President George Washington had the treaty drawn up in terms of equality - without the restrictions imposed on Indian nations by later treaties. The Canandaigua Treaty remains in effect today, and is still formally observed by the U.S. government.

INTERNATIONAL WORK

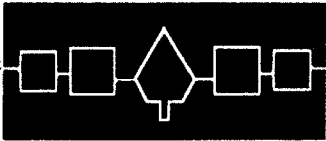
The Haudenosaunee has been working extensively at the UN level in regards to protecting and preserving Indigenous Rights and the Environment. In 1923 a Cayuga Nation chief by the name of Deskaheh took the concerns of the Haudenosaunee of the unfair treatment to his people from the U.S. and Canadian Governments to the League of Nations. He was unsuccessful in his efforts, but showed to the rest of the Nations the Haudenosaunee should be recognized at the International level. Since then we still assert our rights at the international level and travel on our own passports.

Earth Summit in Rio De Janeiro

In June 1992 the Haudenosaunee sent a delegation to the Earth Summit in Rio De Janeiro. Agenda 21 was adopted by the UN Conference on Environment and Development. The purpose of this conference was to devise strategies to halt the effects of environmental degradation. Chapter 26 recognizes Indigenous Peoples have control and jurisdiction over their own environment and has a say in any development projects that impacts the natural resources and the environment. The objectives of this chapter was to empower Indigenous peoples of their participation in National Policy development and ensure their involvement at national and local programs that support sustainable development, such as resource management programs and conservation strategies.

International Decade of World's Indigenous Peoples

In December 1994, was the start of the International decade of World's Indigenous peoples where the goal of the UN is to strengthen international cooperation for the solutions of problems faced by Indigenous peoples in such areas of human rights, the environment, development, education, and health. UNEP Director Noel Brown and Ambassador Johnson from Australia came to the Haudenosaunee and asked them to come up with a document that shows we have jurisdictions over are lands and what we do to protect our natural resources and our environment against environmental degradation. The Haudenosaunee developed the Haudenosaunee Environmental restoration, An Indigenous Strategy for Human Sustainability and presented it to the UN Elders Summit in New York City in July 1995 to launch the beginnings of the International decade of World's Indigenous peoples. The end of this decade was suppose to have achieved adoption of the UN Declaration of Indigenous rights by the UN General Assembly. We came short of this goal by 3 years.



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UN Declaration on the Rights Of Indigenous Peoples

The Haudenosaunee had a hand in drafting the UN Declaration of the Rights of Indigenous Peoples since the establishment of the International Working Group by the UN Commission on Human Rights in Geneva of September 2004.

On September 13, 2007, The United Nations General Assembly adopted the Declaration on the Rights of Indigenous Peoples. This document developed by mutual efforts of many Indigenous leaders and States over a 30 year period, contains many provisions relating to the rights of Indigenous peoples that all countries agree to respect and protect. Of the 46 articles and related provisions outlined in the declaration, we would particularly bring your attention to three articles that would pertain to the EPA PRAP for the Grasse River;

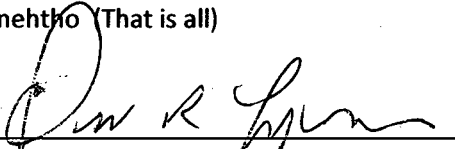
- a. Article 19, States shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.
- b. Article 29, this article contains three important provisions relating to the rights to the conservation and protection of the environment of the lands, territories and resources of indigenous peoples.
- c. Article 37, Indigenous peoples have the right to the recognition, observance and enforcement of treaties, agreements and constructive agreement concluded with States and their successors.


In conclusion, The Mohawk Nation at Akwesasne is a member of HETF and a member Nation of the Haudenosaunee. Therefore, the treaties and International obligations mentioned above apply and EPA should take them in full consideration when implementing a cleanup plan for the Grasse River. HETF supports the Mohawks of Akwesasne in implementation of a full remediation and restoration of the Grasse River. EPA, as an Agent of U.S. is responsible for overseeing the Grasse River remedial plan must ensure that the remedy is sufficient to protect not only the natural resources of this area, but also the way of life for Mohawks and Haudenosaunee citizens and the future generations.

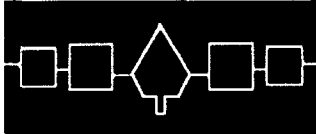
"In making any law, our Chiefs must always consider three things; their effect of their decision on peace; the effect on the natural world; and the effect of the seven generations in the future. We believe that all law makers should be required to think this way, that all constitutions should contain these rules. To us, it does not matter whether it can be scientifically proven that life as we know it is in danger. If the possibility exists, we must live everyday as it is true, for we cannot afford, any of us, to ignore that possibility of every living thing relies on us to fulfill our responsibilities as they fulfill theirs."

(Carol Jacobs, Cayuga Clanmother, presentation to the UN Elders Summit, July 18, 1995, New York City)

Thanehtio (That is all)


Oren Lyons, Political Co-chair, HETF


F. Henry Lickers, Scientific Co-chair, HETF



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Environmental Task Force

**VIA: PO Box 992
Hogansburg, NY 13655**

**Tel: (518) 358-4286
www.hetf.org**

**Cc: Lisa Jackson, Administrator, EPA
Joann Chase, Director, AEIO
Chief Roger Hill, Tonawanda Seneca Nation
Chief Leo Henry, Tuscarora Nation
Chief Sidney Hill, Thatotaho, Onondaga Nation
Karl Hill, Cayuga Nation**



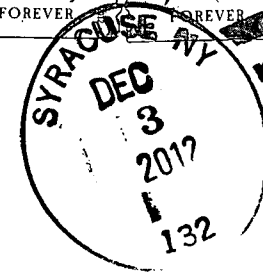
HAUDENOSAUNEE

Mohawk • Onida • Onondaga • Cayuga • Seneca • Tuscarora

ENVIRONMENTAL TASK FORCE

Akwesasne Mohawk Territory

Via: PO Box 992
Hogansburg, NY 13655



YOUNG S. Chang
Remedial Project Manager
U.S.E.P.A.
290 Broadway, 20th Floor
New York, N.Y.
10007-1866

Young S. Chang, Remedial Project Manager
United States Environmental Protection Agency
290 Broadway - 20th Floor
New York, New York 10007-1866
Fax # 212-637-3966
Email: chang.young@epa.gov

Dear Ms. Chang,

I am writing to comment on the proposed plan for the remediation of the Grasse River in Massena, New York. As a member of the St. Lawrence River Area of Concern Remedial Advisory Committee since 1988, I have been following all aspects of projects related to this important boundary water and have very strong feelings on this matter.

First of all, I am disappointed that Alcoa has spent ten to fifteen years on research, studies and pilot projects concerning contaminated sediments in the Grasse River without finding a feasible alternative to dredging. Previous projects at the General Motors and former Reynolds Metals sites have shown that dredging, done correctly, can be safe, effective and is a truly permanent solution.

Secondly, I am extremely concerned that under this "preferred option", the most highly concentrated



levels of contaminated sediments would not be the ones to be dredged, but would be "capped" or "armor capped" and left in place.

Thirdly, I am alarmed that EPA would ever consider capping a "permanent solution" leaving contaminated sediments in place will always constitute a threat to human health and all portions of the environment, because any unforeseen future events could damage or destroy the caps.

Fourth, somewhere in the media or materials distributed regarding this remediation, I have heard or read the term - "natural recovery". I hope that you and others at EPA realize that this is a ridiculous term. PCB's are a persistent hazard - they change arachnors, get buried deeper under other sediments, move to other areas, move up the food chain, but they are a hazard as long as they are left at large in the environment.

Because it seems that EPA is hesitant to require dredging all contaminated sediments at this point, I would remind you of the solution at the GRI Superfund site, where EPA divided the Remedial Decision into two parts. Alcoa could be allowed to dredge the near shore areas, while the capped and armor capped areas would be considered an interim and non-permanent solution. Thank you for your important work in restoring our wonderful river, Lucia "Luce" Dailey

To: Grasse River Remedial Plan
Young S. Chang, Remedial Project Manager
United States Environmental Protection Agency
290 Broadway - 20th Floor
New York, New York 10007-1816

Fax # 212-637-3966

From: Lucia D. "Luke" Dailey

U.S. FOIA Exemption 6 Redaction



November 16, 2012

Young S. Chang
Remedial Project Manager
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

RE: EPA Proposed Remedial Action Plan (PRAP) for the Grasse River

Watkwanonwaraton:

The Chiefs, Clanmothers, Faithkeepers, people and children and those unborn from the Kanien'kehaka (Mohawk) Nation offer you their arm of peace and hope that this letter finds you in good health and spirits. The Kanien'kehaka Nation is recognized by the Haudenosaunee (Six Nations) Confederacy and by U.S. treaties signed with the Six Nations with its Council fire at Akwesasne. The Kanien'kehaka Nation government is traditional government of the Mohawk people and one of the oldest existing governments on Turtle Island (North America). At this time, the Kanien'kehaka Nation Council would like to express its concern regarding the EPA Proposed Remedial Action Plan for the Grasse River.

The Kanien'kehaka Nation believes our environment is the total integration of life's forces, its physical manifestations of the Natural world. We are a part of a delicate environmental balance. It is our contention that we must maintain harmony and equilibrium within the Natural laws of creation. We personify our connection to our natural world, giving full regard and respect to our mother Earth. We recognize our responsibility to respect and cherish the gifts of mother earth. Our special relationship carries a responsibility which we reinforce in ideology and in action. This foresight and conviction to the welfare of our people and the environment is expressed when we speak of the next seven generations.

The Mohawk people of Akwesasne have a long history of concern for the St. Lawrence River. The Mohawks call it the Kaniatarowanenneh or 'the majestic river'. This area is considered the traditional hunting grounds of the Mohawk people when they resided in the Mohawk valley and other Nations by treaty. This area of the St. Lawrence River in conjunction with the Grasse River was rich with fish, wildlife, and plant life which maintained the Mohawk way of life which continues to this day.

This area became a major commercial route from eastern Canada to the mid-west of the United States starting in the 1830's with the Beauharnais canal and control structure which the Mohawks of Akwesasne objected to because we would feel the immediate impacts to our lands and our environment. Then the Seaway and the FDR-SLR power project come into the area in the 1950s and then the industries moved into the area to take advantage of the cheap electricity and the rights of the Mohawks people were ignored.

160870



We see our lands being eroded daily from the ships passing though our territory. We have seen the dredging of the Seaway, destroying fish spawning grounds, witnessing fish populations disappearing from the area, along with the turbines from the power dam chopping up eels only to have them placed on the endangered list. We witness prime forest and agricultural lands and islands being flooded by the construction of the dam. Then the Industries spewed all kinds of toxic chemicals out of their plants into the rivers, which leads us to where we are today, the proposed cleanup plan for the Grasse River.

EPA's Proposed Remedial Action plan for the Grasse River will leave 90% of PCBs contaminated sediments in place which is unacceptable to the Kanien'kehaka Nation. PCBs are a known carcinogen and endocrine disruptor. There been studies all over the world to prove this. The Mohawk People of Akwesasne have higher levels of PCBs due in part of their diet that includes traditional consumption of locally caught fish and wildlife. After the fish and wildlife studies in the early eighties, it was determined To not eat any fish or wildlife caught in the St. Lawrence, Grasse River and Racquette River below the SLR power project. The Mohawks went from a rich protein diet to a high carbohydrate diet which caused a drastic increase in diabetes at Akwesasne. Other studies have shown PCBs at lower levels in the body to cause auto immune disorders, effects menopause and reproduction, growth in aging, obesity and diabetes.

The Akwesasne Community is considered an environmental injustice site. In February 1994, President Bill Clinton issued Executive order 12898, federal Actions to address Environmental Justice in minority and low income populations. In January 2010 Administrator Lisa Jackson made expanding the conservation on environmentalism and working for environmental justice an Agency priority. The EPA PRAP for the Grasse River goes against all the principle guidelines set up under the Environmental justice program for the Agency. In order to achieve environmental justice, you must clean up the natural resources, that minority communities are dependent on to preserve their way of life. "Working together to achieve Environmental justice requires coordination, consultation, a genuine desire to work together between governmental agencies and impacted community." (Barbara (Kanatiiosh) Gray, Haudenosaunee Environmental News Report, March 2002, Vol. 1, No. 6)

In Conclusion, The Kanien'kehaka Nation cannot support EPA's selection of Alternative 6 to remediate the Grasse River. Covering up contaminated sediments is not a remedy and ignores our responsibility to the natural world. We can only support the selection of Alternative 9 that will remove more of the contaminated sediments from the bottom of the Grasse River. We can assure things will get much worse if you ignore your responsibilities of leadership. We urge you to consider the instructions given to the Haudenosaunee leaders over a thousand years ago by our Peacemaker: *When you sit and Council for the welfare of your people, think not of yourself, your family or even your generation, but make decisions for the welfare of the peoples coming in the future, unto the seventh generation.* Thus we become responsible leaders for the future of all of creation living upon this earth. The test of leadership is guiding people during hard times.

Tanehtho (that is all),


Turtle Clan


Bear Clan


Wolf Clan

MOHAWK NATION COUNCIL OF CHIEFS

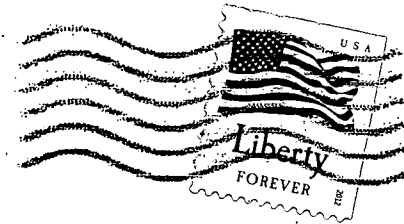
P.O. Box 366, Rooseveltown, N.Y. 13683



HOTINONSHONNI

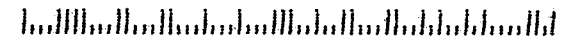
SYRACUSE NY 130

04 JAN 2013 PM 3 L



Young S. Chang
Remedial Project Manager
US Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

10007186699



APPENDIX III: ADMINISTRATIVE RECORD INDEX

Provided on DVDs that also includes the Record of Decision and Responsiveness Summary.

COMPREHENSIVE ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA



113235

Region ID: 02

Doc ID: 113235

Bates: To:

Date: 09/28/2012

Pages: 65

Title: COMPREHENSIVE ADMINISTRATIVE RECORD INDEX FOR THE GRASSE RIVER (ALCOA AGGREGATION) SITE

Doc Type: INDEX

<u>Name</u>	<u>Organization</u>
Author: ,	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 38799

Bates: To:

Date: 01/01/1111

Pages: 17

Title: INDEX, DOCUMENT NUMBER ORDER, ALUMINUM COMPANY OF AMERICA (ALCOA) SITE DOCUMENTS.

Doc Type: INDEX

<u>Name</u>	<u>Organization</u>
Author: ,	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 101289

Bates: To:

Date: 01/01/1111

Pages: 1

Title: ALUMINUM COMPANY OF AMERICA (ALCOA) SITE, ADMINISTRATIVE RECORD FILE UPDATE, INDEX OF DOCUMENTS

Doc Type: INDEX

<u>Name</u>	<u>Organization</u>
Author: ,	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

COMPREHENSIVE ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113117

Bates: ALC-001-0001 **To:** ALC-001-0045

Date: 01/01/1111

Pages: 46

Title: ALCOA Monthly Progress Reports for December 1989 to August 1990, October 1990 to May 1991, and January 1992 to July 1992

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113118

Bates: ALC-001-0046 **To:** ALC-001-0199

Date: 05/01/1990

Pages: 155

Title: Sampling and Analysis Plan, Hydrologic Characterization Studies of the Grasse River

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	YOUNG-MORGAN & ASSOCIATES. INC.

<u>Name</u>	<u>Organization</u>

Addressee: , ALUMINUM COMPANY OF AMERICA (ALCOA)

Region ID: 02

Doc ID: 113119

Bates: ALC-001-0200 **To:** ALC-001-0269

Date: 08/22/1990

Pages: 70

Title: Field Oversight Work Plan, Additional River Sampling, Reynolds Metals Company, Massena, New York

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: SULLIVAN, DOUGLAS	ALLIANCE TECHNOLOGIES CORP

<u>Name</u>	<u>Organization</u>

Addressee: CARSON, LISA EPA

COMPREHENSIVE ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113120

Bates: ALC-001-0270 **To:** ALC-001-0289

Date: 08/27/1990

Pages: 20

Title: Oversight of Additional River Sampling Activities, Brossman Short Form, Reynolds Metals Company Site, Massena, New York

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
-------------	---------------------

Author: SULLIVAN, DOUGLAS	ALLIANCE TECHNOLOGIES CORP
----------------------------------	----------------------------

<u>Name</u>	<u>Organization</u>
-------------	---------------------

Addressee: CARSON, LISA	EPA
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Region ID: 02

Doc ID: 113121

Bates: ALC-001-0290 **To:** ALC-001-0419

Date: 06/01/1991

Pages: 129

Title: River and Sediment Investigation Workplan, Remedial Assessment Studies, Grasse River

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
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Author: ,	YOUNG-MORGAN & ASSOCIATES. INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Doc ID: 113122

Bates: ALC-001-0420 **To:** ALC-001-0475

Date: 07/01/1991

Pages: 56

Title: River and Sediment Investigation, Site Management Plan, Grasse River, Massena, New York

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ECOLOGY AND ENVIRONMENT, INC
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	ALUMINUM COMPANY OF AMERICA (ALCOA)
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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113123

Bates: ALC-001-0476 **To:** ALC-001-0523

Date: 07/01/1991

Pages: 48

Title: Quality Assurance Project Plan, River and Sediment Investigation, Grasse River, Massena, New York. Appendix 1: Analytical Protocols

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	ECOLOGY AND ENVIRONMENT, INC

<u>Name</u>	<u>Organization</u>
Addressee: ,	ALUMINUM COMPANY OF AMERICA (ALCOA)

Region ID: 02

Doc ID: 113124

Bates: ALC-001-0524 **To:** ALC-001-0663

Date: 07/01/1991

Pages: 138

Title: River and Sediment Investigation, Site Operations Plan, Remedial Assessment Studies, Grasse River

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	YOUNG-MORGAN & ASSOCIATES. INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	ALUMINUM COMPANY OF AMERICA (ALCOA)

Region ID: 02

Doc ID: 113125

Bates: ALC-001-0664 **To:** ALC-001-0665

Date: 11/03/1989

Pages: 2

Title: Letter requesting authorization for ALCOA to submit plans for hydrological characterization of the ALCOA Study Area and an extension of the submittal date as proposed in the Administrative Order

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)

<u>Name</u>	<u>Organization</u>
Addressee: VISNIC, CHRISTINE	EPA

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113126

Bates: ALC-001-0666 **To:** ALC-001-0667

Date: 11/16/1989

Pages: 2

Title: Letter forwarding the proposed Field Sampling Plan for hydrological characterization of the ALCOA Study Area

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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<u>Name</u>	<u>Organization</u>
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Addressee: VISNIC, CHRISTINE	EPA
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Region ID: 02

Doc ID: 113127

Bates: ALC-001-0668 **To:** ALC-001-0668

Date: 11/20/1989

Pages: 1

Title: Letter authorizing ALCOA to submit a plan for a hydrological characterization of the study area and granting ALCOA an extension of fifteen days for submittal of the RSI Work Plan

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: PETERSEN, CAROLE	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Addressee: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Doc ID: 113128

Bates: ALC-001-0669 **To:** ALC-001-0672

Date: 11/22/1989

Pages: 4

Title: Letter commenting on the November 1989 "Hydrologic Characterization Studies of the Grasse River", prepared by YMA for the Aluminum Company of America

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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<u>Name</u>	<u>Organization</u>
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Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

<u>Name</u>	<u>Organization</u>
Addressee: VISNIC, CHRISTINE	EPA

Region ID: 02

Doc ID: 113129

Bates: ALC-001-0673 **To:** ALC-001-0675

Date: 11/27/1989

Pages: 3

Title: Letter forwarding the enclosed Attachment "A" to the "Hydrologic Characterization studies of the Grasse River"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<u>Name</u>	<u>Organization</u>
Addressee: VISNIC, CHRISTINE	EPA

Region ID: 02

Doc ID: 113130

Bates: ALC-001-0676 **To:** ALC-001-0676

Date: 11/27/1989

Pages: 1

Title: Letter commenting on the "Hydrologic Characterization Studies of the Grasse River"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: JOCK, KEN	ST. REGIS MOHAWK TRIBE

<u>Name</u>	<u>Organization</u>
Addressee: VISNIC, CHRISTINE	EPA

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CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113131

Bates: ALC-001-0677 **To:** ALC-001-0677

Date: 01/09/1990

Pages: 1

Title: Letter requesting written authorization for ALCOA to reschedule the Hydrologic Characterization Studies of the ALCOA site

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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<u>Name</u>	<u>Organization</u>
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Addressee: VISNIC, CHRISTINE	EPA
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Region ID: 02

Doc ID: 113132

Bates: ALC-001-0678 **To:** ALC-001-0678

Date: 01/24/1990

Pages: 1

Title: Letter stating that the new project manager for the Aluminum Company of America site will be Lisa Carson, effective January 29, 1990

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: VISNIC, CHRISTINE	EPA
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<u>Name</u>	<u>Organization</u>
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Addressee: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Doc ID: 113133

Bates: ALC-001-0679 **To:** ALC-001-0686

Date: 02/12/1990

Pages: 8

Title: Letter forwarding the enclosed comments on the December 1989 "River and Sediment Investigation Work Plan"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113134

Bates: ALC-001-0687 **To:** ALC-001-0688

Date: 02/22/1990

Pages: 2

Title: Letter commenting on ALCOA'S River and Sediment Investigation Work Plan

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: JOCK, KEN	ST. REGIS MOHAWK TRIBE
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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Region ID: 02

Doc ID: 113135

Bates: ALC-001-0689 **To:** ALC-001-0690

Date: 05/10/1990

Pages: 2

Title: Letter forwarding the enclosed comments on the "Sampling and Analysis Plan for the Remedial Investigation/Feasibility Study, Hydrologic Characterization Studies of the Grasse River"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: PAVLOU, GEORGE	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Addressee: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Doc ID: 113136

Bates: ALC-001-0691 **To:** ALC-001-0694

Date: 01/01/1111

Pages: 4

Title: Enclosure #1: SAP for Hydrologic Characterization Studies of the Grasse River

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
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Author: ,	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113137

Bates: ALC-001-0695 **To:** ALC-001-0715

Date: 01/01/1111

Pages: 21

Title: Enclosure #2: Section D "Container Preparation and Cleaning Procedures", Section E "Quality Assurance/Quality Control Requirements"

Doc Type: EPA GUIDANCE DOCUMENT

<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113138

Bates: ALC-001-0716 **To:** ALC-001-0716

Date: 10/23/1990

Pages: 1

Title: Letter commenting on the various plans and studies enclosed pertaining to the Aluminum Company of America site

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<u>Name</u>	<u>Organization</u>
Addressee: CARSON, LISA	EPA

Region ID: 02

Doc ID: 113139

Bates: ALC-001-0717 **To:** ALC-001-0720

Date: 01/01/1111

Pages: 4

Title: Enclosure A: NYSDEC Review Comments on the September 1990 River and Sediment Investigation Work Plan, prepared for Aluminum Company of America, prepared by Young-Morgan & Associates

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
Author: ,	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<u>Name</u>	<u>Organization</u>

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Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113140

Bates: ALC-001-0721 **To:** ALC-001-0723

Date: 01/01/1111

Pages: 3

Title: Enclosure B: NYSDEC Review Comments on the September 1990 River and Sediment Investigation, Site Operations Plan, prepared for Aluminum Company of America, prepared by Young-Morgan and Associates

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
Author: ,	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113141

Bates: ALC-001-0724 **To:** ALC-001-0724

Date: 01/01/1111

Pages: 1

Title: Enclosure C: NYSDEC Review Comments on the September 1990 Quality Assurance Project Plan, Appendix 1 "Analytical Protocols", prepared for the Aluminum Company of America, prepared by Young-Morgan & Associates

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
Author: ,	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
<u>Name</u>	<u>Organization</u>

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113142

Bates: ALC-001-0725 **To:** ALC-001-0726

Date: 01/01/1111

Pages: 2

Title: Enclosure D: NYSDEC Review Comments on the September 1990 Hydrologic Characterization Studies, Grasse River, Massena, New York , prepared for the Aluminum Company of America, prepared by Young Morgan & Associates

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
Author: ,	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113143

Bates: ALC-001-0727 **To:** ALC-001-0727

Date: 06/06/1990

Pages: 1

Title: Letter authorizing ALCOA to proceed with an analysis of alternatives for the ALCOA site and stating that a detailed work plan for conduct of an analysis of remedial alternatives must be submitted

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: PAVLOU, GEORGE	EPA, REGION 2
<u>Name</u>	<u>Organization</u>
Addressee: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)

Region ID: 02

Doc ID: 113144

Bates: ALC-001-0728 **To:** ALC-001-0729

Date: 07/20/1990

Pages: 2

Title: Letter forwarding the enclosed work comments on the "River and Sediment Work Plan Remedial Assessment Studies, Grasse River Work Plan"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: PAVLOU, GEORGE	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

<u>Name</u>	<u>Organization</u>
Addressee: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)

Region ID: 02

Doc ID: 113145

Bates: ALC-001-0730 **To:** ALC-001-0736

Date: 01/01/1111

Pages: 7

Title: Enclosure #1: RSI Work Plan

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
Author: ,	EPA, REGION 2

<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113146

Bates: ALC-001-0737 **To:** ALC-001-0803

Date: 01/25/1990

Pages: 67

Title: Enclosure #2: Letter following-up a previous letter regarding the "Sampling, Analysis & Monitoring Plan, Additional River Sampling, St. Lawrence River System for Reynolds Metals Company, Massena, NY" with enclosed ARAR's package

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<u>Name</u>	<u>Organization</u>
Addressee: CARSON, LISA	EPA

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113147

Bates: ALC-001-0804 **To:** ALC-001-0804

Date: 01/01/1111

Pages: 1

Title: Enclosure #3: St. Regis Mohawk Tribe PCB ARARs

Doc Type: CHART / TABLE

<u>Name</u>	<u>Organization</u>
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113148

Bates: ALC-001-0805 **To:** ALC-001-0805

Date: 12/23/1987

Pages: 1

Title: Enclosure #4: Short Communication "An In Situ River Exposure Vessel for Bioaccumulation Studies with Juvenile Fish"

Doc Type: ARTICLE

<u>Name</u>	<u>Organization</u>
Author: SLOAN, RONALD J	NY STATE DEPT OF ENVIRONMENTAL CONSERVATION (NYSDEC)
JONES, PETER A	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113149

Bates: ALC-001-0806 **To:** ALC-001-0806

Date: 06/12/1991

Pages: 1

Title: Letter forwarding comments on the "River and Sediment Investigation Site Management Plan (SMP) , Grasse River, Massena, New York"

Doc Type: ARTICLE

<u>Name</u>	<u>Organization</u>
Author: JONES, PETER A	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
BROWN, MARK P	NY STATE DEPT OF ENVIRONMENTAL CONSERVATION (NYSDEC)
SLOAN, RONALD J	NY STATE DEPT OF ENVIRONMENTAL CONSERVATION (NYSDEC)
<u>Name</u>	<u>Organization</u>

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Region ID: 02

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CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113150

Bates: ALC-001-0807 **To:** ALC-001-0807

Date: 06/27/1990

Pages: 1

Title: Letter approving the revised May 1990 "Sampling and Analysis Plan, Hydrologic Characterization Studies of the Grasse River"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: PAVLOU, GEORGE EPA, REGION 2

<u>Name</u>	<u>Organization</u>
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Addressee: FLORIO, SHAWN A ALUMINUM COMPANY OF AMERICA (ALCOA)

Region ID: 02

Doc ID: 113151

Bates: ALC-001-0808 **To:** ALC-001-0809

Date: 07/05/1990

Pages: 2

Title: Letter expressing concern that deadlines may not be met due to prolonged regulatory review of work plans submitted by ALCOA to EPA

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: FLORIO, SHAWN A ALUMINUM COMPANY OF AMERICA (ALCOA)

<u>Name</u>	<u>Organization</u>
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Addressee: PAVLOU, GEORGE EPA, REGION 2

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113152

Bates: ALC-001-0810

To: ALC-001-0811

Date: 07/30/1990

Pages: 2

Title: Memo discussing the observation of hydrologic study field work at the ALCOA site

Doc Type: MEMORANDUM

<u>Name</u>	<u>Organization</u>
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Author: CARSON, LISA	EPA
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	FILE
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Region ID: 02

Doc ID: 113153

Bates: ALC-001-0812

To: ALC-001-0813

Date: 08/03/1990

Pages: 2

Title: Letter requesting that the submittal of the Revised River and Sediment Investigation Work Plan be rescheduled and that EPA clarify that Paragraphs 108-110 will apply to the September 10, 1990 package submittal

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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Region ID: 02

Doc ID: 113154

Bates: ALC-001-0814

To: ALC-001-0815

Date: 08/08/1990

Pages: 2

Title: Letter approving an extension of the time required to submit the revisions to the "River and Sediment Work Plan, Remedial Assessment Studies, Grasse River Work Plan"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: PAVLOU, GEORGE	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Addressee: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

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SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113155

Bates: ALC-001-0816

To: ALC-001-0821

Date: 09/07/1990

Pages: 6

Title: Letter forwarding the River and Sediment Investigation (RSI) Work Plan and Site Operations Plan and the enclosed response to EPA's comments on the RSI Work Plan

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: FLORIO, SHAWN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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Region ID: 02

Doc ID: 113156

Bates: ALC-001-0822

To: ALC-001-0882

Date: 12/01/1990

Pages: 61

Title: Capabilities Statement: "Determination of Polychlorinated Dibenzo-p-dioxins and Polychlorinated Dibenzofurans"

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: DEROOS, FRED L	TWIN CITY TESTING CORPORATION
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113157

Bates: ALC-001-0883

To: ALC-001-0886

Date: 01/01/1111

Pages: 4

Title: Capabilities Sheet: "Polychlorinated Dioxins and Furans"

Doc Type: MEMORANDUM

<u>Name</u>	<u>Organization</u>
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Author: ,	ENSECO
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<u>Name</u>	<u>Organization</u>
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CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113158

Bates: ALC-001-0887 **To:** ALC-001-0888

Date: 03/22/1991

Pages: 2

Title: Letter forwarding EPA's comments on the enclosed work and operations plans and characterization studies pertaining to the ALCOA site

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: PAVLOU, GEORGE	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Addressee: LEASE, JOHN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Doc ID: 113159

Bates: ALC-001-0889 **To:** ALC-001-0895

Date: 01/01/1111

Pages: 7

Title: Enclosure #1: Comments on the River and Sediment Investigation (RSI) Work Plan

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
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Author: ,	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113160

Bates: ALC-001-0896 **To:** ALC-001-0905

Date: 01/01/1111

Pages: 10

Title: Enclosure #2: Comments on the RSI Site Operations Plan (SOP) and the Field Sampling Plan (FSP)

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
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Author: ,	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113161

Bates: ALC-001-0906 **To:** ALC-001-1125

Date: 01/01/1111

Pages: 219

Title: Enclosure #3: Comments on the Hydrologic Characterization (HC) Studies Report (with attachments)

Doc Type: LIST

<u>Name</u>	<u>Organization</u>
Author: ,	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113162

Bates: ALC-001-1126 **To:** ALC-001-1127

Date: 06/12/1991

Pages: 2

Title: Letter forwarding comments on the "River and Sediment Investigation Site Management Plan (SMP), Grasse River, Massena, New York"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
<u>Name</u>	<u>Organization</u>
Addressee: CARSON, LISA	EPA

Region ID: 02

Doc ID: 113163

Bates: ALC-001-1128 **To:** ALC-001-1132

Date: 06/11/1991

Pages: 5

Title: NYSDEC Review Comments on the "River and Sediment Investigation Site Management Plan, Grasse River, Massena, New York, Dated May 1991"

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
Author: ,	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
<u>Name</u>	<u>Organization</u>

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CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113164

Bates: ALC-001-1133 **To:** ALC-001-1134

Date: 06/13/1991

Pages: 2

Title: Letter forwarding comments on the "River and Sediment Investigation Site Management Plan (SMP)"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: CARSON, LISA	EPA
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<u>Name</u>	<u>Organization</u>
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Addressee: LEASE, JOHN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Doc ID: 113165

Bates: ALC-001-1135 **To:** ALC-001-1139

Date: 06/11/1991

Pages: 5

Title: Enclosure 1: NYSDEC Review Comments on the "River and Sediment Investigation, Site Management Plan, Grasse River, Massena, New York, Dated May 1991"

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
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Author: ,	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113166

Bates: ALC-001-1140 **To:** ALC-001-1143

Date: 01/01/1111

Pages: 4

Title: Enclosure 2: Additional Comments on the "Draft Site Management Plan, Dated May 1991, Prepared by Ecology and Environment" and the "Site Operations Plan (SOP), Dated April 1991, Prepared by Young-Morgan & Associates"

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
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Author: ,	EPA, REGION 2
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CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113167

Bates: ALC-001-1144 **To:** ALC-001-1173

Date: 07/01/1989

Pages: 30

Title: Attachment: Specifications and Guidance for Obtaining Containment-Free Sample Containers

Doc Type: EPA GUIDANCE DOCUMENT

<u>Name</u>	<u>Organization</u>
Author: ,	EPA, REGION 2

<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113168

Bates: ALC-001-1174 **To:** ALC-001-1179

Date: 07/03/1991

Pages: 6

Title: Letter responding to issues raised by ALCOA during a June 19, 1991 conference call between representatives of EPA, ALCOA, and Ecology and Environment, Inc.

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: CARSON, LISA	EPA

<u>Name</u>	<u>Organization</u>
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Addressee: FLORIO, SHAWN A ALUMINUM COMPANY OF AMERICA (ALCOA)

Region ID: 02

Doc ID: 113169

Bates: ALC-001-1180 **To:** ALC-001-1181

Date: 07/19/1991

Pages: 2

Title: Letter forwarding comments on four ALCOA River Sediment Investigation Workplan documents

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<u>Name</u>	<u>Organization</u>
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OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

<u>Name</u>	<u>Organization</u>
Addressee: CARSON, LISA	EPA

Region ID: 02

Doc ID: 113170

Bates: ALC-001-1182 **To:** ALC-001-1184

Date: 01/01/1111

Pages: 3

Title: Enclosure: NYSDEC Review Comments on ALCOA, EPA, 106 Order "Revised River and Sediment Investigation (RSI) Project Documents"

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
Author: ,	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113171

Bates: ALC-001-1185 **To:** ALC-001-1186

Date: 08/02/1991

Pages: 2

Title: Letter conditionally accepting the use of hexabromobenze (HBB) in place of decochloribiphenyl (DCB) as a surrogate standard for packed column PCB analysis of sediment sample

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: MOMBERGER, GEORGE	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

<u>Name</u>	<u>Organization</u>
Addressee: CARSON, LISA	EPA

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SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113172

Bates: ALC-001-1187 **To:** ALC-001-1189

Date: 08/02/1991

Pages: 3

Title: Letter conditionally approving the "River and Sediment Investigation Workplan", the "Site Operations Plan", the "Site Management Plan", Revision 3, and the "Quality Assurance Project Plan, River and Sediment Investigation, Appendix 1"

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: MCCABE, WILLIAM	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Addressee: LEASE, JOHN A	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Region ID: 02

Doc ID: 113173

Bates: ALC-001-1190 **To:** ALC-001-1198

Date: 10/28/1991

Pages: 9

Title: Letter forwarding revised copies of Tables 1, 2 and 3 which summarize NYSDEC's split sample activity during the ALCOA RSI in the Grasse River and associated water bodies

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: REAGAN, JIM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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CERCLIS: NYD980506232

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SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113174

Bates: ALC-001-1199 **To:** ALC-001-1200

Date: 10/30/1991

Pages: 2

Title: Letter discussing ALCOA'S October 11, 1991 proposed project schedule for preparation and submission of the draft "River and Sediment Investigation Report" and related issues

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: DAIGLE, WILLIAM	NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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Region ID: 02

Doc ID: 113175

Bates: ALC-001-1201 **To:** ALC-001-1211

Date: 11/04/1991

Pages: 11

Title: Letter stating that the Statement of Qualifications is in the process of being rewritten and forwarding the enclosed control charts showing internal quality control

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: DEROOS, FRED L	TWIN CITY TESTING CORPORATION
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<u>Name</u>	<u>Organization</u>
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Addressee: SACHS, JANET	TMS ANALYTICAL SERVICES, INC.
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Region ID: 02

Doc ID: 113176

Bates: ALC-001-1212 **To:** ALC-001-1212

Date: 11/06/1991

Pages: 1

Title: Letter forwarding information of the proposed dioxin laboratories for EPA's review

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: SHORT, RUSSELL A	ECOLOGY AND ENVIRONMENT, INC
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113177

Bates: ALC-001-1213 **To:** ALC-001-1219

Date: 01/22/1992

Pages: 7

Title: Letter forwarding the attached sediment core descriptions recorded while performing oversight at the ALCOA site during August 12 - September 7, 1991

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: SULLIVAN, DOUGLAS	ALLIANCE TECHNOLOGIES CORP
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<u>Name</u>	<u>Organization</u>
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Addressee: FLORIO, SEAN	ECOLOGY AND ENVIRONMENT, INC
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Region ID: 02

Doc ID: 113178

Bates: ALC-001-1220 **To:** ALC-001-1223

Date: 01/11/1992

Pages: 4

Title: Letter containing comments and questions about the Grasse River and Sediment Investigation prepared by Ecology and Environment for ALCOA

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: JOCK, KEN	ST. REGIS MOHAWK TRIBE
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<u>Name</u>	<u>Organization</u>
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Addressee: CARSON, LISA	EPA
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Region ID: 02

Doc ID: 113179

Bates: ALC-001-1224 **To:** ALC-001-1252

Date: 09/28/1989

Pages: 29

Title: Administrative Order, Index No. II CERCLA - 90229 : In the Matter of the Aluminum Company of America

Doc Type: ADMIN. ORDER

<u>Name</u>	<u>Organization</u>
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Author: MUSZYNSKI, WILLIAM J	EPA, REGION 2
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	ALUMINUM COMPANY OF AMERICA (ALCOA)
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Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113180

Bates: ALC-001-1253 **To:** ALC-001-1258

Date: 02/03/1989

Pages: 6

Title: Response to the 104(e) Request for Information Letter

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: WILSON, DOUGLAS R	ALUMINUM COMPANY OF AMERICA (ALCOA)
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<u>Name</u>	<u>Organization</u>
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Addressee: VISNIC, CHRISTINE	EPA
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Region ID: 02

Doc ID: 113181

Bates: ALC-001-1259 **To:** ALC-001-1260

Date: 11/13/1989

Pages: 2

Title: Letter stating that ALCOA intends to attempt to comply with the Administrative Order and discussing the legal and technical objections ALCOA has regarding the Order

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: WAECHTER, RALPH W	ALUMINUM COMPANY OF AMERICA (ALCOA)
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<u>Name</u>	<u>Organization</u>
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Addressee: CORMAN, BERNICE I	EPA
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Region ID: 02

Doc ID: 113182

Bates: ALC-001-1261 **To:** ALC-001-1264

Date: 01/01/1111

Pages: 3

Title: Objections and Comments of Aluminum Company of America to CERCLA Section 106 Order Dated September 28, 1989

Doc Type: COMMENTS

<u>Name</u>	<u>Organization</u>
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Author: ,	ALUMINUM COMPANY OF AMERICA (ALCOA)
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<u>Name</u>	<u>Organization</u>
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Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113183

Bates: 700001

To: 700506

Date: 04/15/1993

Pages: 506

Title: Report: Revised Risk Assessment, Aluminum Company of America (ALCOA) Study Area, Massena, New York, prepared for the U.S. EPA, Emergency and Remedial Response Division, prepared by TRC Environmental Corporation, April 15, 1993

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	TRC ENVIRONMENTAL CORP
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 113184

Bates: 700507

To: 700540

Date: 08/12/1993

Pages: 34

Title: Report: Revised Pathway Analysis Report, Risk Assessment, Aluminum Company of America (ALCOA), Massena, New York, prepared for the U.S. EPA, Emergency and Remedial Response Division, prepared by TRC Environmental Corporation, August 12, 1993

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	TRC ENVIRONMENTAL CORP
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113189

Bates: R2-0000001

To: R2-0000614

Date: 10/13/1998

Pages: 614

Title: SUPPLEMENTARY REMEDIAL STUDIES DATA REPORT (SRS) FOR THE GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	QUANTITATIVE ENVIRONMENTAL ANALYSIS, LLC
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113208

Bates: R2-0000615

To: R2-0000810

Date: 04/01/2002

Pages: 196

Title: 2001 SUPPLEMENTAL REMEDIAL STUDIES (SRS) PROGRAM - SUMMARY REPORT

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113213

Bates: R2-0000811

To: R2-0000974

Date: 04/01/2003

Pages: 164

Title: 2002 SUPPLEMENTAL REMEDIAL STUDIES (SRS) PROGRAM - SUMMARY REPORT AMENDED APRIL 2003

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

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CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113226

Bates: R2-0000975

To: R2-0001822

Date: 04/01/2005

Pages: 848

Title: 2004 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113227

Bates: R2-0001823

To: R2-0001968

Date: 07/01/2006

Pages: 146

Title: 2005 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113230

Bates: R2-0001969

To: R2-0003338

Date: 06/01/2007

Pages: 1370

Title: 2006 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

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Region ID: 02

Doc ID: 113232

Bates: R2-0003339

To: R2-0004844

Date: 09/01/2008

Pages: 1506

Title: 2007 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113233

Bates: R2-0004845

To: R2-0005468

Date: 06/01/2009

Pages: 624

Title: 2008 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113234

Bates: R2-0005469

To: R2-0005583

Date: 07/01/2010

Pages: 115

Title: 2009 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

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Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124017

Bates: R2-0005584

To: R2-0005676

Date: 07/01/2011

Pages: 93

Title: 2010 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145540

Bates: R2-0005677

To: R2-0005769

Date: 07/18/2012

Pages: 93

Title: 2011 DATA SUMMARY REPORT (SRS) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113191

Bates: R2-0005770

To: R2-0005830

Date: 12/02/1998

Pages: 61

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT - OSI REPORT NO. 98ES084

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.
<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND, BOUCK & LEE, INC.

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Region ID: 02

Doc ID: 113190

Bates: R2-0005831

To: R2-0005903

Date: 12/01/1998

Pages: 73

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWINGS - OSI REPORT NO. 98ES084

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND, BOUCK & LEE, INC.

Region ID: 02

Doc ID: 113198

Bates: R2-0005904

To: R2-0005930

Date: 08/13/2001

Pages: 27

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT - OSI REPORT NO. 01ES053

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND, BOUCK & LEE, INC.

Region ID: 02

Doc ID: 113199

Bates: R2-0005931

To: R2-0005980

Date: 08/13/2001

Pages: 50

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWINGS - OSI REPORT NO. 01ES053

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND, BOUCK & LEE, INC.

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Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113200

Bates: R2-0005981 **To:** R2-0006007

Date: 12/19/2001

Pages: 27

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT - CAPPING PILOT STUDY T14 TO T18 - OSI REPORT NO. 01ES053.2

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	OCEAN SURVEYS, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	BLASLAND, BOUCK & LEE, INC.
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Region ID: 02

Doc ID: 113201

Bates: R2-0006008 **To:** R2-0006055

Date: 12/19/2001

Pages: 48

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWINGS - CAPPING PILOT STUDY T14 TO T18 - OSI REPORT NO. 01ES053.2

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
-------------	---------------------

Author: ,	OCEAN SURVEYS, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	BLASLAND, BOUCK & LEE, INC.
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Region ID: 02

Doc ID: 113202

Bates: R2-0006056 **To:** R2-0006084

Date: 01/10/2002

Pages: 29

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT - T18 TO T38 - OSI REPORT NO. 01ES053.3

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	OCEAN SURVEYS, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	BLASLAND, BOUCK & LEE, INC.
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Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113203

Bates: R2-0006085 **To:** R2-0006338

Date: 01/10/2002

Pages: 254

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWING - T18 TO T38 - OSI REPORT NO. 01ES053.3

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND, BOUCK & LEE, INC.

Region ID: 02

Doc ID: 113215

Bates: R2-0006339 **To:** R2-0006384

Date: 08/28/2003

Pages: 46

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT - T1 to T38 - OSI REPORT NO. 03ES043

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND, BOUCK & LEE, INC.

Region ID: 02

Doc ID: 113217

Bates: R2-0006385 **To:** R2-0006565

Date: 09/02/2003

Pages: 181

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWINGS - T1 TO T38 - OSI REPORT NO. 03ES043 BOOK 1 OF 3

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND, BOUCK & LEE, INC.

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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113218

Bates: R2-0006566 **To:** R2-0006719

Date: 09/02/2003

Pages: 154

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWINGS - T1 TO T38 - OSI REPORT NO. 03ES043 BOOK 2 OF 3

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
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Author: ,	OCEAN SURVEYS, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	BLASLAND, BOUCK & LEE, INC.
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Region ID: 02

Doc ID: 113219

Bates: R2-0006720 **To:** R2-0006854

Date: 09/02/2003

Pages: 135

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWINGS - T1 TO T38 - OSI REPORT NO. 03ES043 BOOK 3 OF 3

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
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Author: ,	OCEAN SURVEYS, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	BLASLAND, BOUCK & LEE, INC.
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Region ID: 02

Doc ID: 113221

Bates: R2-0006855 **To:** R2-0006888

Date: 11/10/2003

Pages: 34

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT - T38 TO T72 - OSI REPORT NO. 03ES043-2

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	OCEAN SURVEYS, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	BLASLAND BOUCK & LEE INC
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113222

Bates: R2-0006889 **To:** R2-0006948

Date: 11/10/2003

Pages: 60

Title: REMOTE SENSING SURVEY (RSS) - FINAL REPORT DRAWINGS - T38 TO T72 - OSI REPORT NO. 03ES043-2

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: ,	BLASLAND BOUCK & LEE INC

Region ID: 02

Doc ID: 113188

Bates: R2-0006949 **To:** R2-0007109

Date: 11/01/1996

Pages: 161

Title: Consolidated Work Plan, Supplemental Remedial Studies to Support the Grasse River Analysis of Alternatives, Aluminum Company of America, Grasse River Study Area, Massena, New York

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	CAMP DRESSER & MCKEE INC
,	ALUMINUM COMPANY OF AMERICA

<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113195

Bates: R2-0007110 **To:** R2-0007263

Date: 03/01/2001

Pages: 154

Title: Supplemental Remedial Studies Program: 2001 Monitoring Work Plan, Grasse River Study Area, Massena, New York

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.

<u>Name</u>	<u>Organization</u>
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CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113197

Bates: R2-0007264 **To:** R2-0007388

Date: 07/12/2001

Pages: 125

Title: FINAL Capping Pilot Study Work Plan, Grasse River Study Area, Massena, New York

Doc Type: PLAN

	<u>Name</u>	<u>Organization</u>
Author: ,		ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113207

Bates: R2-0007389 **To:** R2-0007428

Date: 04/01/2002

Pages: 40

Title: Supplemental Remedial Studies Program: 2002 Monitoring Work Plan, Grasse River Study Area, Massena, New York, April 2002.

Doc Type: PLAN

	<u>Name</u>	<u>Organization</u>
Author: ,		ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113214

Bates: R2-0007429 **To:** R2-0007479

Date: 04/01/2003

Pages: 51

Title: 2003 Monitoring Work Plan, Grasse River Study Area, Massena, New York, April 2003.

Doc Type: PLAN

	<u>Name</u>	<u>Organization</u>
Author: ,		ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

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Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113225

Bates: R2-0007480

To: R2-0007534

Date: 04/01/2004

Pages: 55

Title: 2004 Monitoring Work Plan, Grasse River Study Area, Massena, New York, April 2004.

Doc Type: REPORT

	<u>Name</u>	<u>Organization</u>
Author:	,	ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145464

Bates: R2-0007535

To: R2-0008110

Date: 02/11/2005

Pages: 576

Title: REMEDIAL OPTIONS PILOT STUDY WORK PLAN - GRASSE RIVER STUDY AREA

Doc Type: PLAN

	<u>Name</u>	<u>Organization</u>
Author:	,	ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124010

Bates: R2-0008111

To: R2-0008139

Date: 04/01/2006

Pages: 29

Title: WORK PLAN 2006 SEDIMENT SAMPLING PROGRAM FOR THE LOWER GRASSE RIVER

Doc Type: PLAN

	<u>Name</u>	<u>Organization</u>
Author:	,	ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

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Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124016

Bates: R2-0008140

To: R2-0008177

Date: 07/01/2006

Pages: 38

Title: MONITORING WORK PLAN 2006 POST REMEDIAL OPTIONS PILOT STUDY

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124018

Bates: R2-0008178

To: R2-0008226

Date: 09/01/2007

Pages: 49

Title: FINAL WORK PLAN PHASE 2 SEDIMENT SAMPLING PROGRAM FOR THE LOWER GRASSE RIVER

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124011

Bates: R2-0008227

To: R2-0008251

Date: 11/30/2006

Pages: 25

Title: REVISED PHYSICAL MODEL STUDY WORK PLAN FOR ICE CONTROL STRUCTURE ON THE LOWER GRASSE RIVER

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124014

Bates: R2-0008252 **To:** R2-0008253

Date: 11/30/2006

Pages: 2

Title: TRANSMITTAL OF THE REVISED PHYSICAL MODEL STUDY WORK PLAN FOR ICE CONTROL STRUCTURE ON THE LOWER GRASSE RIVER

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: MCSHEA, LAWRENCE J	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: CHANG, YOUNG	EPA
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Region ID: 02

Doc ID: 141580

Bates: R2-0008254 **To:** R2-0008374

Date: 08/01/2006

Pages: 121

Title: FINAL WORK PLAN OF THE IN-SITU PCB BIOAVAILABILITY REDUCTION IN GRASSE RIVER SEDIMENTS

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 113229

Bates: R2-0008375 **To:** R2-0008411

Date: 03/01/2007

Pages: 37

Title: Final Work Plan, Lower Grasse River Ice Breaking Demonstration Project, Grasse River Study Area, Massena, New York, March 2007.

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113210

Bates: R2-0008412 **To:** R2-0008563

Date: 07/01/2002

Pages: 152

Title: HUMAN HEALTH RISK ASSESSMENT UPDATE - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113212

Bates: R2-0008564 **To:** R2-0008569

Date: 09/10/2002

Pages: 6

Title: US EPA COMMENTS ON THE HUMAN HEALTH RISK ASSESMENT DATED JULY 1, 2002

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: LOGAN, MARY	EPA
<u>Name</u>	<u>Organization</u>
Addressee: MCSHEA, LAWRENCE J	ALCOA TECHNICAL CENTER

Region ID: 02

Doc ID: 145466

Bates: R2-0008570 **To:** R2-0008700

Date: 07/29/2010

Pages: 131

Title: ECOLOGICAL RISK ANALYSIS UPDATE - FINAL REPORT - ALCOA MASSENA WEST FACILITY SITE

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: KRACKO, KAREN	LOCKHEED MARTIN INFORMATION SYSTEMS & GLOBAL SOLUTIONS
MILLER, DENNIS A	LOCKHEED MARTIN/REAC
<u>Name</u>	<u>Organization</u>

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141586

Bates: R2-0008701

To: R2-0008706

Date: 11/16/2010

Pages: 6

Title: HISTORICAL BACKGROUND ON GRASSE RIVER RISK ASSESSMENT

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113185

Bates: R2-0008707

To: R2-0008832

Date: 04/17/1995

Pages: 126

Title: SITE-SPECIFIC HEALTH AND SAFETY PLAN FOR DREDGING AND DEWATERING PILOT PROJECT FOR THE GRASSE RIVER STUDY AREA FOR THE NON-TIME CRITICAL REMOVAL ACTION

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
<u>Name</u>	<u>Organization</u>

Author: , OHM REMEDIATION SERVICES CORP.

<u>Name</u>	<u>Organization</u>
<u>Name</u>	<u>Organization</u>

Addressee: , ALUMINUM COMPANY OF AMERICA

Region ID: 02

Doc ID: 109866

Bates: R2-0008833

To: R2-0008840

Date: 05/24/1995

Pages: 8

Title: AMENDMENT TO ADMINISTRATIVE ORDER Index No. II CERCLA-90229, IN THE MATTER OF THE ALUMINUM COMPANY OF AMERICA, RESPONDENT, PROCEEDING UNDER SECTION 106 (a) OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT, 42 U.S.C. 9606 (a)

Doc Type: ORDER

<u>Name</u>	<u>Organization</u>
<u>Name</u>	<u>Organization</u>

Author: FOX, JEANNE M EPA, REGION 2

<u>Name</u>	<u>Organization</u>
<u>Name</u>	<u>Organization</u>

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 113186

Bates: R2-0008841 **To:** R2-0008949

Date: 12/01/1995

Pages: 109

Title: DRAFT NON-TIME-CRITICAL REMOVAL ACTION DOCUMENTATION REPORT - VOLUME I OF II - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	BLASLAND, BOUCK & LEE, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113187

Bates: R2-0008950 **To:** R2-0009629

Date: 12/01/1995

Pages: 680

Title: DRAFT NON-TIME-CRITICAL REMOVAL ACTION DOCUMENTATION REPORT - VOLUME II OF II (APPENDICES) - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	BLASLAND, BOUCK & LEE, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 141617

Bates: R2-0009630 **To:** R2-0009639

Date: 06/20/1996

Pages: 10

Title: US EPA COMMENTS ON THE DRAFT NON-TIME-CRITICAL REMOVAL ACTION DOCUMENTATION REPORT SUBMITTED BY THE ALUMINUM COMPANY OF AMERICA (ALCOA)

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: PETERSEN, CAROLE	EPA, REGION 2
<u>Name</u>	<u>Organization</u>
Addressee: DARGAN, PATRICK C	ALUMINUM COMPANY OF AMERICA

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
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OUID: 01
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Region ID: 02

Doc ID: 141618

Bates: R2-0009640 **To:** R2-0009654

Date: 07/23/1996

Pages: 15

Title: ALCOA'S RESPONSE TO COMMENTS ON THE NON-TIME-CRITICAL REMOVAL ACTION DOCUMENTATION REPORT

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: DARGAN, PATRICK C	ALUMINUM COMPANY OF AMERICA
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<u>Name</u>	<u>Organization</u>
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Addressee: KELLY, ANNE	EPA, REGION 2
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Region ID: 02

Doc ID: 141582

Bates: R2-0009655 **To:** R2-0009995

Date: 04/01/2001

Pages: 341

Title: COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER REPORT - VOLUME 1 OF 2

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 141583

Bates: R2-0009996 **To:** R2-0010471

Date: 04/01/2001

Pages: 476

Title: COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER REPORT - VOLUME 2 OF 2

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

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Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141590

Bates: R2-0010472 **To:** R2-0010475

Date: 06/01/2001

Pages: 4

Title: SUPERFUND PROGRAM UPDATE FOR THE GRASSE RIVER STUDY AREA FOR JUNE 2001

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113205

Bates: R2-0010476 **To:** R2-0010733

Date: 03/01/2002

Pages: 258

Title: REMEDY SELECTION BRIEFING PACKAGE - GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	TAMS CONSULTANTS, INC.
<u>Name</u>	<u>Organization</u>
Addressee: ,	EPA, REGION 2

Region ID: 02

Doc ID: 124007

Bates: R2-0010734 **To:** R2-0011055

Date: 04/01/2002

Pages: 322

Title: DOCUMENTATION REPORT - GRASSE RIVER CAPPING PILOT STUDY

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

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Region ID: 02

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Region ID: 02

Doc ID: 113216

Bates: R2-0011056

To: R2-0011259

Date: 09/01/2003

Pages: 204

Title: 2002 Capping Pilot Study Monitoring Program, Summary Report, Grasse River Study Area, Massena, New York, February 2003, Amended September 2003

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113223

Bates: R2-0011260

To: R2-0011316

Date: 01/15/2004

Pages: 57

Title: MULTIBEAM HYDROGRAPHIC SURVEY - FINAL REPORT DRAWINGS - T1 TO T14 AND T18 TO T38 - OSI REPORT NO. 03ES043 BOOK 1 OF 1

Doc Type: DRAWING

<u>Name</u>	<u>Organization</u>
Author: ,	OCEAN SURVEYS, INC.
<u>Name</u>	<u>Organization</u>

Addressee: , BLASLAND BOUCK & LEE INC

Region ID: 02

Doc ID: 113224

Bates: R2-0011317

To: R2-0011388

Date: 01/16/2004

Pages: 72

Title: MULTI BEAM HYDROGRAPHIC SURVEY - FINAL REPORT - T1 TO T14 AND T18 TO T38

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: HALL, JEFFREY	OCEAN SURVEYS, INC.

<u>Name</u>	<u>Organization</u>
Addressee: VANDEWALKER, HEATHER	BLASLAND, BOUCK & LEE, INC.

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Region ID: 02

Doc ID: 141591

Bates: R2-0011389

To: R2-0011392

Date: 06/01/2004

Pages: 4

Title: SUPERFUND PROGRAM UPDATE FOR THE GRASSE RIVER STUDY AREA FOR JUNE 2004

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124001

Bates: R2-0011393

To: R2-0011454

Date: 03/25/2005

Pages: 62

Title: CONTINGENCY PLAN - REMEDIAL OPTIONS PILOT STUDY

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	SEVENSON ENVIRONMENTAL SERVICES, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124002

Bates: R2-0011455

To: R2-0011516

Date: 03/25/2005

Pages: 62

Title: INDEPENDENT QUALITY ASSURANCE TEAM PLAN - REMEDIAL OPTIONS PILOT STUDY

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

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Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124003

Bates: R2-0011517

To: R2-0011543

Date: 03/31/2005

Pages: 27

Title: STORMWATER POLLUTION PREVENTION PLAN - REMEDIAL OPTIONS PILOT STUDY

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	SEVENSON ENVIRONMENTAL SERVICES, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124004

Bates: R2-0011544

To: R2-0011781

Date: 03/31/2005

Pages: 238

Title: OPERATIONAL HEALTH AND SAFETY PLAN, ADDENDUM NO. 1 - REMEDIAL OPTIONS PILOT STUDY

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	SEVENSON ENVIRONMENTAL SERVICES, INC.
<u>Name</u>	<u>Organization</u>

Addressee: , ALCOA, INC.

Region ID: 02

Doc ID: 141592

Bates: R2-0011782

To: R2-0011785

Date: 04/01/2005

Pages: 4

Title: COMMUNITY HEALTH AND SAFETY FOR THE GRASSE RIVER REMEDIAL OPTIONS PILOT STUDY

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	US ENVIRONMENTAL PROTECTION AGENCY
,	REGION 2
,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

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SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141593

Bates: R2-0011786 **To:** R2-0011789

Date: 04/01/2005

Pages: 4

Title: SUPERFUND PROGRAM UPDATE FOR THE GRASSE RIVER STUDY AREA FOR APRIL 2005

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124005

Bates: R2-0011790 **To:** R2-0011846

Date: 04/22/2005

Pages: 57

Title: COMMUNITY HEALTH AND SAFETY PLAN - REMEDIAL OPTIONS PILOT STUDY

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 141587

Bates: R2-0011847 **To:** R2-0011909

Date: 05/01/2005

Pages: 63

Title: REMEDIAL OPTIONS PILOT STUDY (ROPS) GRASSE RIVER STUDY AREA PHASE 1A
ARCHAEOLOGICAL ASSESSMENT

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
<u>Name</u>	<u>Organization</u>

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124006

Bates: R2-0011910

To: R2-0012090

Date: 05/05/2005

Pages: 181

Title: OPERATIONS PLAN - REMEDIAL OPTIONS PILOT STUDY

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	SEVENSON ENVIRONMENTAL SERVICES, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 141581

Bates: R2-0012091

To: R2-0012238

Date: 02/03/2006

Pages: 148

Title: CERTIFICATION REPORTS FOR OPERATION AND INTERIM CAPPING OF SECURE LANDFILL CELL 3 IN 2005

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	CDM
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 123519

Bates: R2-0012239

To: R2-0012240

Date: 02/03/2006

Pages: 2

Title: TRANSMITTAL OF THE CERTIFICATION REPORT FOR OPERATIONS AND INTERIM CAPPING OF SECURE LANDFILL CELL 3 IN 2005

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

COMPREHENSIVE ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124009

Bates: R2-0012241 **To:** R2-0012304

Date: 04/01/2006

Pages: 64

Title: TECHNICAL MEMORANDUM GRASSE RIVER PROJECT 2004 / 2005 RIVER ICE MONITORING DOCUMENTATION SUMMARY REVISION NO. 1

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 124008

Bates: R2-0012305 **To:** R2-0012306

Date: 04/14/2006

Pages: 2

Title: TRANSMITTAL REGARDING TECHNICAL MEMORANDUM - GRASSE RIVER PROJECT 2004 / 2005 RIVER ICE, MONITORING DOCUMENTATION SUMMARY, REVISION NO. 1

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: MCSHEA, LAWRENCE J	ALCOA, INC.
<u>Name</u>	<u>Organization</u>
Addressee: CHANG, YOUNG	EPA

Region ID: 02

Doc ID: 123998

Bates: R2-0012307 **To:** R2-0012882

Date: 05/01/2006

Pages: 576

Title: DRAFT REMEDIAL OPTIONS PILOT STUDY DOCUMENTATION REPORT AND APPENDICES A THROUGH E - VOLUME I OF 2 GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>
Addressee: ,	EPA, REGION 2

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FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 123999

Bates: R2-0012883

To: R2-0014282

Date: 05/01/2006

Pages: 1400

Title: APPENDIX F - OPERATIONAL DATA AND CONSTRUCTION RELATED INFO FOR THE DRAFT REMEDIAL OPTIONS PILOT STUDY DOCUMENTATION REPORT VOLUME I GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 124000

Bates: R2-0014283

To: R2-0014674

Date: 05/01/2006

Pages: 392

Title: APPENDIX G - ENGINEERING CHANGE NOTICES / DESIGN CLARIFICATION FORMS FOR THE DRAFT REMEDIAL OPTIONS PILOT STUDY DOCUMENTATION REPORT VOLUME II GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124019

Bates: R2-0014675 **To:** R2-0017710

Date: 05/01/2006

Pages: 3036

Title: APPENDIX H - IQAT FORMS FOR THE DRAFT REMEDIAL OPTIONS PILOT STUDY
DOCUMENTATION REPORT VOLUME II GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 124020

Bates: R2-0017711 **To:** R2-0018459

Date: 05/01/2006

Pages: 749

Title: APPENDIX I THROUGH N OF THE DRAFT REMEDIAL OPTIONS PILOT STUDY
DOCUMENTATION REPORT VOLUME II GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 124021

Bates: R2-0018460 **To:** R2-0018528

Date: 05/01/2006

Pages: 69

Title: APPENDIX O THROUGH P THE DRAFT REMEDIAL OPTIONS PILOT STUDY
DOCUMENTATION REPORT VOLUME II GRASSE RIVER STUDY AREA

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141594

Bates: R2-0018529 **To:** R2-0018530

Date: 09/01/2006

Pages: 2

Title: ACTIVATED CARBON PILOT STUDY UPDATE FOR THE GRASSE RIVER STUDY AREA FOR SEPTEMBER 2006

Doc Type: FACTSHEET

<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 141595

Bates: R2-0018531 **To:** R2-0018534

Date: 09/01/2006

Pages: 4

Title: SUPERFUND PROGRAM UPDATE FOR THE GRASSE RIVER STUDY AREA FOR SEPTEMBER 2006

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.

Region ID: 02

Doc ID: 124012

Bates: R2-0018535 **To:** R2-0018770

Date: 12/01/2006

Pages: 236

Title: FINAL SITE SPECIFIC HEALTH AND SAFETY PLAN FOR THE LOWER GRASSE RIVER ICE BREAKING DEMONSTRATION PROJECT

Doc Type: PLAN

<u>Name</u>	<u>Organization</u>
Author: ,	MCKEIL MARINE LTEE
Addressee: ,	ALCOA, INC.

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FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 124015

Bates: R2-0018771 **To:** R2-0018773

Date: 12/12/2006

Pages: 3

Title: TRANSMITTAL OF THE FINAL SITE SPECIFIC HEALTH AND SAFETY PLAN FOR THE LOWER GRASSE RIVER ICE BREAKING DEMONSTRATION PROJECT

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: MCSHEA, LAWRENCE J	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: CHANG, YOUNG	EPA
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Region ID: 02

Doc ID: 141615

Bates: R2-0018774 **To:** R2-0018811

Date: 12/06/2006

Pages: 38

Title: ALCOA'S RESPONSE TO AGENCIES COMMENTS ON THE DRAFT REMEDIAL OPTIONS PILOT STUDY DOCUMENTATION REPORT FOR THE GRASSE RIVER PROJECT

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: MCSHEA, LAWRENCE J	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: CHANG, YOUNG S	EPA, REGION 2
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Region ID: 02

Doc ID: 141596

Bates: R2-0018812 **To:** R2-0018815

Date: 01/01/2007

Pages: 4

Title: LOWER GRASSE RIVER ICE BREAKING DEMONSTRATION PROJECT UPDATE - JANUARY 2007

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141597

Bates: R2-0018816 **To:** R2-0018817

Date: 03/01/2007

Pages: 2

Title: LOWER GRASSE RIVER ICE BREAKING DEMONSTRATION PROJECT UPDATE - MARCH 2007

Doc Type: OTHER

	<u>Name</u>	<u>Organization</u>
Author: ,		ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113228

Bates: R2-0018818 **To:** R2-0018837

Date: 03/01/2007

Pages: 20

Title: Lower Grasse River Ice Breaking Demonstration Project - Community Health and Safety Plan, Grasse River Study Area, Massena, New York, March 2007.

Doc Type: REPORT

	<u>Name</u>	<u>Organization</u>
Author: ,		ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 113231

Bates: R2-0018838 **To:** R2-0019325

Date: 11/01/2007

Pages: 488

Title: Grasse River Activated Carbon Pilot Study, Construction Documentation Report, Grasse River Study Area, Massena, New York. (With Attachment: CD-ROM)

Doc Type: REPORT

	<u>Name</u>	<u>Organization</u>
Author: ,		ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141598

Bates: R2-0019326

To: R2-0019330

Date: 03/28/2008

Pages: 5

Title: LOWER GRASSE RIVER PROJECT STATUS UPDATE

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 141584

Bates: R2-0019331

To: R2-0019666

Date: 04/01/2009

Pages: 336

Title: DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME I OF II MAIN REPORT

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Addressee: , EPA, REGION 2

Region ID: 02

Doc ID: 141585

Bates: R2-0019667

To: R2-0019840

Date: 04/01/2009

Pages: 174

Title: DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME II OF II WITH APPENDICES A THROUGH F

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Addressee: , EPA, REGION 2

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FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 123986

Bates: R2-0019841

To: R2-0020566

Date: 04/01/2009

Pages: 726

Title: APPENDIX G - 2003 REMOTE SENSING SURVEYS OF THE DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME II OF II APPENDICES

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 123987

Bates: R2-0020567

To: R2-0020770

Date: 04/01/2009

Pages: 204

Title: APPENDICES H THROUGH J OF THE DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME II OF II APPENDICES

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 123988

Bates: R2-0020771

To: R2-0021388

Date: 04/01/2009

Pages: 618

Title: APPENDICES K THROUGH N OF THE DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME II OF II APPENDICES

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE

CERCLIS: NYD980506232

OUID: 01

SSID: 024E

Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 123989

Bates: R2-0021389

To: R2-0021758

Date: 04/01/2009

Pages: 370

Title: APPENDIX O - 2003-2004 TREE SCAR SURVEYS OF THE DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME II OF II APPENDICES

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 123990

Bates: R2-0021759

To: R2-0021824

Date: 04/01/2009

Pages: 66

Title: APPENDIX P - SEDIMENT STRATIGRAPHY ANALYSIS OF THE DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME II OF II APPENDICES

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 123991

Bates: R2-0021825 **To:** R2-0022215

Date: 04/01/2009

Pages: 391

Title: APPENDICES Q THROUGH W OF THE DRAFT ADDENDUM TO THE COMPREHENSIVE CHARACTERIZATION OF THE LOWER GRASSE RIVER - VOLUME II OF II APPENDICES

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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Addressee: ,	EPA, REGION 2
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Region ID: 02

Doc ID: 141588

Bates: R2-0022216 **To:** R2-0022218

Date: 05/08/2009

Pages: 3

Title: TRUSTEES QUESTIONS FOR FLUVIAL GEOMORPHOLOGIST

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
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Author: TARBELL , BARBARA	ST. LAWRECE TRUSTEES
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<u>Name</u>	<u>Organization</u>
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Region ID: 02

Doc ID: 145463

Bates: R2-0022219 **To:** R2-0022511

Date: 10/07/2009

Pages: 293

Title: GRASSE RIVER T6.75 ICE CONTROL STRUCTURE - FINAL BASIS OF DESIGN REPORT

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
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Author: ,	ALCOA, INC.
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<u>Name</u>	<u>Organization</u>
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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141589

Bates: R2-0022512

To: R2-0022525

Date: 08/31/2010

Pages: 14

Title: FLUVIAL GEOMORPHOLOGY REVIEW AND TRUSTEE AREAS OF INQUIRY

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: ,	TETRA TECH, INC
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145462

Bates: R2-0022526

To: R2-0023754

Date: 03/29/2011

Pages: 1229

Title: DRAFT NEAR SHORE SAMPLING PROGRAM REPORT

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	ALCOA, INC.
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 141614

Bates: R2-0023755

To: R2-0023756

Date: 09/28/2011

Pages: 2

Title: APPLICATION OF TRIBAL STANDARDS TO THE GRASSE RIVER STUDY AREA SITE

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: MUGDAN, WALTER E	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

COMPREHENSIVE ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 141616

Bates: R2-0023757 **To:** R2-0023757

Date: 08/14/2012

Pages: 1

Title: COMMENTS ON THE DRAFT PROPOSED PLAN FOR THE GRASSE RIVER SUPERFUND SITE
- TARGET SHEET ONLY

Doc Type: REFERENCE SHEET

<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 141612

Bates: R2-0023758 **To:** R2-0023767

Date: 09/07/2012

Pages: 10

Title: ST. REGIS MOHAWK TRIBE'S REQUEST FOR EXTENSION OF THE COMMENT PERIOD FOR
THE DRAFT PROPOSED PLAN FOR THE GRASSE RIVER SUPERFUND SITE

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: HART, RANDY	ST REGIS MOHAWK TRIBE
THOMPSON, PAUL O	ST REGIS MOHAWK TRIBE
LAFRANCE, RON	ST REGIS MOHAWK TRIBE

<u>Name</u>	<u>Organization</u>

Addressee: MUGDAN, WALTER E EPA, REGION 2

Region ID: 02

Doc ID: 141613

Bates: R2-0023768 **To:** R2-0023791

Date: 09/11/2012

Pages: 24

Title: LEGAL MEMORANDUM - SAINT REGIS MOHAWK TRIBE'S RESPONSE TO ALCOA'S INITIAL
COMMENTS ON THE ARAR SELECTION FOR THE RECORD OF DECISION

Doc Type: MEMORANDUM

<u>Name</u>	<u>Organization</u>
Author: SCHMIDT, MARSHA K	HOBBS, STRAUS, DEAN, & WALKER

<u>Name</u>	<u>Organization</u>

Addressee: MUGDAN, WALTER E EPA, REGION 2

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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 145541

Bates: R2-0023792 **To:** R2-0023794

Date: 09/20/2012

Pages: 3

Title: UPDATE TO SEPTEMBER 28, 2011, EPA MEMORANDUM TO FILE REGARDING APPLICATION OF SRMT SEDIMENT STANDARD AT GRASSE RIVER STUDY AREA SITE

Doc Type: MEMORANDUM

<u>Name</u>	<u>Organization</u>
Author: MUGDAN, WALTER E	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145552

Bates: R2-0023795 **To:** R2-0023798

Date: 09/20/2012

Pages: 4

Title: SAINT REGIS MOHAWK TRIBE COMMENTS ON THE AUGUST 2012 DRAFT PROPOSED REMEDIAL ACTION PLAN (PRAP)

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: JOCK, KEN	ST. REGIS MOHAWK TRIBE
<u>Name</u>	<u>Organization</u>
Addressee: MUGDAN, WALTER E	EPA, REGION 2

Region ID: 02

Doc ID: 145551

Bates: R2-0023799 **To:** R2-0023802

Date: 09/25/2012

Pages: 4

Title: SAINT REGIS MOHAWK TRIBE COMMENTS ON THE PROPOSED REMEDIAL ACTION PLAN (PRAP)

Doc Type: LETTER

<u>Name</u>	<u>Organization</u>
Author: JOCK, KEN	ST. REGIS MOHAWK TRIBE
<u>Name</u>	<u>Organization</u>
Addressee: MUGDAN, WALTER E	EPA, REGION 2

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09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 145556

Bates: R2-0023803 To: R2-0023813

Date: 02/12/2002

Pages: 11

Title: PRINCIPLES FOR MANAGING CONTAMINATED SEDIMENT RISKS AT HAZARDOUS WASTE SITES - OSWER DIRECTIVE 9285.6-08

Doc Type: MEMORANDUM

<u>Name</u>	<u>Organization</u>
Author: HORINKO, MARIANNE	EPA, REGION 2
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145558

Bates: R2-0023814 To: R2-0024049

Date: 12/01/2005

Pages: 236

Title: CONTAMINATED SEDIMENT REMEDIATION GUIDANCE FOR HAZARDOUS WASTE SITES - OSWER 9355.0-85

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	US ENVIRONMENTAL PROTECTION AGENCY
<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145555

Bates: R2-0024050 To: R2-0024112

Date: 02/01/2008

Pages: 63

Title: THE 4 R'S OF ENVIRONMENTAL DREDGING: RESUSPENSION, RELEASE, RESIDUAL, AND RISK

Doc Type: REPORT

<u>Name</u>	<u>Organization</u>
Author: ,	US ARMY CORPS OF ENGINEERS
<u>Name</u>	<u>Organization</u>

COMPREHENSIVE ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 145557

Bates: R2-0024113 **To:** R2-0024220

Date: 08/04/2011

Pages: 108

Title: MEETING MINUTES - ALCOA-MASSENA COMMUNITY ADVISORY PANEL FROM APRIL 18, 2001 THROUGH AUGUST 4, 2011

Doc Type: MEETING MINUTES

<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145559

Bates: R2-0024221 **To:** R2-0024671

Date: 01/01/2001

Pages: 451

Title: NATIONAL ACADEMIES PRESS WEBSITE: A RISK MANAGEMENT STRATEGY FOR PCB-CONTAMINATED SEDIMENTS

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	NATIONAL RESEARCH COUNCIL

Region ID: 02

Doc ID: 145554

Bates: R2-0024672 **To:** R2-0024988

Date: 09/28/2012

Pages: 317

Title: NATIONAL ACADEMIES PRESS WEBSITE: SEDIMENT DREDGING AT SUPERFUND MEGASITES: ASSESSING THE EFFECTIVENESS

Doc Type: OTHER

<u>Name</u>	<u>Organization</u>
Author: ,	NATIONAL RESEARCH COUNCIL

COMPREHENSIVE ADMINISTRATIVE RECORD INDEX OF DOCUMENTS

FINAL

09/28/2012

Region ID: 02

Site Name: ALCOA AGGREGATION SITE
CERCLIS: NYD980506232
OUID: 01
SSID: 024E
Action: GRASSE RIVER-ALCOA

Region ID: 02

Doc ID: 145465

Bates: R2-0024989

To: R2-0025878

Date: 09/28/2012

Pages: 890

Title: FINAL ANALYSIS OF ALTERNATIVES REPORT

Doc Type: REPORT

	<u>Name</u>	<u>Organization</u>
Author:	,	US ENVIRONMENTAL PROTECTION AGENCY
	,	ALCOA, INC.
	<u>Name</u>	<u>Organization</u>

Region ID: 02

Doc ID: 145560

Bates: R2-0025879

To: R2-0025909

Date: 09/28/2012

Pages: 31

Title: PROPOSED PLAN FOR THE GRASSE RIVER (ALCOA AGGREGATION) SITE

Doc Type: PLAN

	<u>Name</u>	<u>Organization</u>
Author:	,	US ENVIRONMENTAL PROTECTION AGENCY
	<u>Name</u>	<u>Organization</u>

Public Meeting Notices

Indian Time - November 8, 2012

Daily Courier Observer - November 8, 2012

Watertown Daily Times - November 11, 2012



The EPA Invites Public Comment on the Proposed Cleanup Plan for the Grasse River Superfund Site in the Town of Massena, St. Lawrence County, New York

The U.S. Environmental Protection Agency has issued a Proposed Plan for the Grasse River Superfund site in Massena, New York. The Proposed Plan identifies the EPA's preferred cleanup plan for addressing contaminated river sediment and the rationale for this preference.

The EPA's preferred cleanup plan consists of the following: 1) dredging approximately 109,000 cubic yards of near-shore sediment, 2) backfilling excavated areas with clean material, 3) placement of an armored cap in the upper two miles of the river's main channel where sediment is potentially susceptible to scouring from severe ice jam events, 4) placement of a sand and gravel cap over the remaining 5-mile stretch of the main channel, 5) monitoring of fish, water and sediment to determine when cleanup goals have been reached, and 6) implementation (or modification) of institutional controls, such as fish consumption advisories, until goals are met.

As part of the public comment period, the EPA will also hold a set of public meetings and public information sessions in Akwesasne and Massena to discuss and receive comments on the preferred cleanup plan. The public meetings will include a formal presentation by the EPA on the preferred cleanup plan and other cleanup options considered for the site. The public meetings are also an opportunity to provide oral comments on the Proposed Plan for the record. The information sessions will be less formal, and will provide the public with an opportunity to discuss the cleanup options with EPA representatives on a one-on-one basis. You can submit written comments at the information sessions or public meetings. There will be no formal presentations or recording of comments at the information sessions, although comment cards will be available for the public to submit written comments to the EPA. For more information, please contact Larisa Romanowski, EPA's Community Involvement Coordinator, at 518-747-4389.

Akwesasne: Monday, October 29, 2012

Public Information Session: 1 - 3 p.m.

St. Regis Mohawk School

Multipurpose Room (Use Visitor's Entrance)
385 Church Street
Akwesasne, NY 13655

Public Meeting: 7 - 9 p.m.

Office for the Aging - Seniors

Dining Hall
29 Business Park Road
Akwesasne, NY 13655

Massena: Tuesday, October 30, 2012

Public Information Session: 1 - 3 p.m.

Public Meeting: 7 - 9 p.m.

Massena Town Hall

60 Main Street, Board Room #30
Massena, NY 13662

The Proposed Plan and other site documents are available electronically at <http://www.epa.gov/region2/superfund/npl/aluminumcompany/>. Project documents are also available for public review at the following information repositories established for the Site:

Massena Public Library

41 Glenn Street
Massena, NY 13662
(315) 769-9914

Akwesasne Library

321 State Route 37
Akwesasne, NY 13655
(518) 358-2240

St. Regis Mohawk Tribe – Environmental Division

449 Frogtown Road
Akwesasne, NY 13655
By appointment: (518) 358-5937

USEPA Region 2, Superfund Records Center

290 Broadway, 18th Floor
New York, NY 10007-1866
(212) 637-4308

The EPA is taking written comments on the Proposed Plan for the Grasse River Superfund Site through November 15, 2012. Comments should be emailed or post marked by November 15 and sent to: **Young S. Chang, Remedial Project Manager**, U.S. Environmental Protection Agency, 290 Broadway, 20th Floor, New York, NY 10007-1866, Fax: (212) 637-3966, Email: chang.young@epa.gov.

In Top-Heavy Big East, Middling Teams Aim for Bowl

SYRACUSE (AP) - Just when it seemed Syracuse was over the hump, the Orange self-destructed again and rejoined a dubious Big East crowd that also includes South Florida, Connecticut, Pitt and Temple.

With the season winding down, dreams of the postseason are getting oh-so-dim for these programs.

While Rutgers, Louisville and Cincinnati orchestrate memorable seasons in the ever-changing Big East, the beat goes on for these mediocre teams that have struggled to find consistency as the landscape of the league begins to turn.

Doug Marrone's Orange (4-5) have a glimmer of hope, needing to win two of the last three games. For UConn and USF, both 3-6, there is no margin for error — they have to win out to reach the six victories needed to become bowl eligible.

Paul Chryst, in his first year at Pitt, is in the same boat as Marrone. The Panthers are 4-5, have three games left and might be able to carry over some momentum from their near upset of No. 3 Notre Dame last week. Pitt has won two of the last three, and faces UConn on Friday.

Meanwhile, Temple (3-5) is sort of in a league of its own. After rejoining the Big East in March, the Owls were left with only 11 games on this season's schedule. They've been trying to sched-

ule a 12th opponent, and a December game at Hawaii remains a possibility.

Without the extra contest, it's wait till next year for the Owls. So, just getting to a 12th is a big goal.

"I think it would be tremendous for us to have another at the end," Temple coach Steve Addazio said. "I don't know if we will or we won't. We'd love another chance. It means more practice. It means another game for a young football team. It means another opponent to fight for a win. That would be a great opportunity if something could happen to create that. We would embrace that."

Temple's season has gone south because the Owls also can't seem to embrace the ball. They lost four fumbles, three in the second half, in a 45-17 loss at unbeaten Louisville on Saturday after playing the No. 11 Cardinals to a standstill in the opening half.

Three straight losses have put a damper on the season for Temple. Picked to finish last in the conference, the Owls started strong with wins over UConn and South Florida and led then-No. 19 Rutgers 10-0 at halftime before folding.

"I feel like we're ahead of schedule," Addazio said. "I don't think we're far off. (We have to) think big, focus small."

Syracuse's up-and-down season is down again for the moment after a 35-24 loss at Cincinnati. The Orange, leaving for the ACC next season, was seeking its third straight conference win, something not done in 11 years.

Instead, Syracuse lost two fumbles that set up touchdowns, missed a field goal and had another blocked, was whistled for a dozen penalties for 104 yards, and Brandon Reddish dropped an interception that was a pick-six for the taking.

Back to the drawing board one more time. "What's frustrating is the mistakes that we make that really put us in a tough position to win," Marrone said. "It's happened through the course of the season. It's been very tough for us to overcome those mistakes."

Syracuse (3-2 Big East) is alone in fourth place in the conference and already has lost to two of the three teams on top of the conference — Rutgers and Cincinnati — and hosts top-dog Louisville (9-0) Saturday.

The Orange finish the season with road games at Missouri and Temple. With the 11th-ranked Cardinals coming to town, Marrone isn't looking too far ahead, that's for sure.

"I always look at it from week to week," he said. "I've never really looked at it from the overall picture because you can't. I think it distracts you from the task at hand."

South Florida finally broke out of its Big East funk, beating Connecticut 13-6 on Saturday for

its first conference win of the season after four losses. That also snapped a school-record six-game losing streak. USF entered the UConn game as the only FBS team without an interception and had two picks in the fourth quarter. That was the good news.

The bad? Standout quarterback B.J. Daniels suffered what is likely a season-ending ankle injury. Daniels was hurt on a 15-yard run inside the UConn 10 in the fourth quarter.

And then there's UConn, which is 0-4 in Big East play and has not scored a point in the fourth quarter in its last five games. And the Huskies continued a familiar pattern for all these teams fighting to make the postseason — they turned the ball over on their final three possessions against USF.

Not a good omen as the team preps for Pitt, another team bolting for the ACC next year.

"We still have three pretty meaningful games to play, so obviously to me, there's still a lot of football to play and I'm pretty optimistic that we can do this," UConn coach Paul Pasqualoni said. "Obviously, we're disappointed, but that hasn't diminished what we are doing."

Nobody is giving up. "A lot of teams would just go into the tank, but we're trying to stay together," Huskies linebacker Jory Johnson said. "We have three games left, so we can make this a positive ending or a negative ending."

US's Holcomb Ready for Bobsled Defense

LAKE PLACID, N.Y. (AP) — It has been just over eight months since Steven Holcomb dominated the bobsled world championships. The American is ready to begin a new chapter in his remarkable career as the World Cup season begins on his home track at Mount Van Hoevenberg.

"The expectations are pretty high since we won here last February, but it's not something that I really think about or dwell on," the 32-year-old Holcomb said Wednesday after training. "We're still strong, and I have total confidence in my team going into this year. We're excited to start the competitive season now, and it's especially nice starting out on our home track. There's a level of comfort here. It really is home."

Holcomb, of Park City, Utah, won gold in both the two-man and four-man at the world championships and easily was the class of the field in four-man. Holcomb and his crew of Justin Olsen, Steve Langton and Curt Tomasevich beat Germany's Maximilian Arndt by a half-second, while defending world champion Manuel Machata of Germany took the bronze, eight-tenths of a second behind Holcomb's "Night Train" bobsled.

Holcomb's triumph with Langton in two-man was a first for the United States at worlds since two-man began in 1931, and his string of success has been impressive.

Three years ago, Holcomb broke a 50-year gold-medal drought for America in four-man competition at world championships and took home the bronze in two-man. Two years ago, he won the first four-man Olympic gold for the United States since 1948, and he has 15 individual World Cup medals.

Pilots Nick Cunningham and Cory Butner join Holcomb on the men's side.

Elana Meyers will team with Olympic gold medal sprinter Tianna Madison in women's bob-

sled. Jamie Greubel and rookie Aja Evans shattered the Lake Placid track start record in team selection and figure to be in the mix, while Jazmine Fenlator and Olympic hurdler Lolo Jones, of Des Moines, Iowa, will be in a third sled. Fenlator and Jones had strong results together in the first national seeding race.

The U.S. team concluded last season with five medals at the world championships in Lake Placid, four of them gold. Besides Holcomb's haul, Katie Uhlaender won gold in women's skeleton, the U.S. won gold in the team event, and Meyers took the bronze in women's bobsled.

The World Cup skeleton season also kicks off at Mount Van Hoevenberg beginning Thursday with the first two heats for both the men and women. Skeleton concludes Friday with the final runs of the three-heat races, while women's bobsled and the men's two-man race also will be staged. The four-man race is Saturday.

Uhlaender, who earned an automatic spot on the U.S. team because of her triumph at worlds, will be joined by Kimber Gabrysak. The U.S. men's skeleton team includes Matt Antoine, John Daly and Kyle Tress.

Former world champion Noelle Pikus-Pace, who came out of retirement, was named to the team last week after dominating all four selection races. Pikus-Pace began the season on Wednesday on the North American Cup circuit at the Olympic track in Park City, Utah and again was the class of the field. She beat Melissa Hoar of Australia by 1.29 seconds, with Savannah Graybill of the United State third among 17 sleds.

Pikus-Pace will head to Calgary for the second leg of North American Cup races. After that, she'll be qualified to compete in World Cup and likely will compete at Whistler with a goal of qualifying a third sled for worlds.

Former Penn State President Arraigned

HARRISBURG, Pa. (AP) — Former Penn State president Graham Spanier was arraigned and released on bail at a brief court appearance Wednesday on charges he lied about and concealed child sex abuse allegations involving former assistant football coach Jerry Sandusky.

Spanier, accompanied by his wife, signed paperwork after his bail was set at \$125,000, but he was not required to post any of that amount. He was ordered to forfeit his passport and be fingerprinted. He didn't enter a plea.

Afterward, defense attorney Elizabeth Ainslie told reporters her client is "not guilty, absolutely" and disputed prosecutors' claims Spanier conspired with university athletic director Tim Curley and vice president Gary Schultz. She said Spanier, who testified before a grand jury in the matter, has not been given the opportunity to present his side of the story.

"This wasn't a conspiracy of silence," she said, echoing the charge made last week by state Attorney General Linda Kelly. "That is ridiculous."

Spanier, 64, was charged last week with perjury, obstruction, endangering the welfare of children, failure to properly report suspected abuse and conspiracy for his actions in re-

sponse to complaints about Sandusky showering with children. Spanier has claimed he is being framed for political purposes.

He served as Penn State's president for 16 years but was forced out a year ago after Sandusky was charged along with Curley and Schultz, who were two of Spanier's top underlings. Spanier is on paid leave as a member of the faculty.

Along with the charges against Spanier, prosecutors added counts against Curley and Schultz. They were arraigned Thursday. District judge William Wenner told Spanier and his lawyers the Nov. 16 preliminary hearing date would likely be delayed a month or two.

Curley, the athletic director on leave until the final year of his contract expires, and Schultz, now retired, await trial early next year on charges of failure to report suspected abuse and perjury. Like Spanier, they deny the allegations.


On Monday, state prosecutors filed paperwork telling the judge in the earlier Curley and Schultz case they did not object to their request to delay the planned Jan. 7 start of that trial. The attorney general's office said it would seek to combine those charges, the new charges, and Spanier's case.

4th Annual Hospice Radiothon
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8 a.m. to 2 p.m.

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HOSPICE and Palliative Care
OF ST. LAWRENCE VALLEY

Comment Period Extended on EPA's Proposed Cleanup Plan for the Grasse River Superfund Site in Massena, NY
New Meeting Dates Announced

The U.S. Environmental Protection Agency has issued a Proposed Plan for the Grasse River Superfund site in Massena, New York. The Proposed Plan identifies the EPA's preferred cleanup plan for addressing contaminated river sediment and the rationale for this preference. The EPA's preferred cleanup plan consists of the following: 1) dredging approximately 109,000 cubic yards of near-shore sediment, 2) backfilling excavated areas with clean material, 3) placement of an armored cap in the upper two miles of the river's main channel where sediment is potentially susceptible to scouring from severe ice jam events, 4) placement of a sand and gravel cap over the remaining 5-mile stretch of the main channel, 5) monitoring of fish, water and sediment to determine when cleanup goals have been reached, and 6) implementation (or modification) of institutional controls, such as fish consumption advisories, until goals are met.

As part of the public comment period, the EPA will hold a set of public meetings and public information sessions in Massena and Akwesasne to discuss and receive comments on the preferred cleanup plan. **Due to Hurricane Sandy, the meetings and information sessions originally scheduled for October 29 & 30, 2012 have been rescheduled and the comment period has been extended to November 29, 2012.** The public meetings will include a formal presentation by the EPA on the preferred cleanup plan and other cleanup options considered for the site. The public meetings are also an opportunity to provide oral comments on the Proposed Plan for the record. The information sessions will be less formal, and will provide the public with an opportunity to discuss the cleanup options with EPA representatives on a one-on-one basis. You can submit written comments at the information sessions or public meetings. There will be no formal presentations or recording of comments at the information sessions, although comment cards will be available for the public to submit written comments to the EPA. For more information, please contact David Kluesner, EPA's Community Involvement Coordinator, at 212-637-3653.

<p>Massena: Wednesday, Nov. 14, 2012</p> <p>Public Information Session: 1 - 3 p.m. Massena Town Hall 60 Main Street Board Room #30 Massena, NY 13662</p> <p>Public Meeting: 7 - 9 p.m. Massena Central High School Auditorium 84 Nightengale Avenue Massena, NY 13662</p>	<p>Akwesasne: Thursday, Nov. 15, 2012</p> <p>Public Information Session: 1 - 3 p.m. St. Regis Mohawk School Multipurpose Room (Visitor's Entrance) 385 Church Street Akwesasne, NY 13655</p> <p>Public Meeting: 7 - 9 p.m. Office for the Aging - Seniors Dining Hall 29 Business Park Rd. Akwesasne, NY 13655</p>
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The Proposed Plan and other site documents are available electronically at <http://www.epa.gov/region2/superfund/npl/aluminumcompany/>. Project documents are also available for public review at the following information repositories established for the Site:

<p>Massena Public Library 41 Glenn Street Massena, NY 13662 (315) 769-9914</p> <p>Akwesasne Library 321 State Route 37 Akwesasne, NY 13655 (518) 358-2240</p>	<p>St. Regis Mohawk Tribe - Environmental Division 449 Frogtown Road Akwesasne, NY 13655 By appointment: (518) 358-5937</p> <p>USEPA Region 2, Superfund Records Center 290 Broadway, 18th Floor New York, NY 10007-1866 (212) 637-4308</p>
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The EPA is taking written comments on the Proposed Plan through November 29, 2012. Comments should be emailed or post marked by November 29 and sent to: **Young S. Chang, Remedial Project Manager**, U.S. Environmental Protection Agency, 290 Broadway, 20th Floor, New York, NY 10007-1866, Fax: (212) 637-3966, Email: chang.young@epa.gov.



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Hudson River PCB dredging moved faster this season

'PRODUCTIVE YEAR': Project may be finished before fall 2016

ASSOCIATED PRESS

ALBANY — Crews dredging a contaminated stretch of the upper Hudson River in New York dramatically picked up their pace in the third year of the massive Superfund cleanup.

Workers are expected to have dredged close to 649,000 cubic yards of PCB-contaminated sediment when they wrap up for the season next week — about equal to the dredging total for the first two years on the river. Crews working for General Electric Co. were helped along this year by good river conditions — compared to heavy flooding last year — and an expanded facility for processing the contaminated mud.

The project overseen by the federal Environmental Protection Agency is on track to be finished by fall 2016 or even earlier. Still, a GE spokesman said there's no guarantee this year's fast pace can be replicated, given changeable river conditions and the fact that crews are working their way downriver, farther away from the processing facility.

"It has been a productive year, but it's tempting to underestimate the logistical complexity of the project," said GE spokesman Mark Behan.

GE is expected to spend more than \$1 billion on the federal Superfund project to dredge up polychlorinated biphenyls it released into the river before 1977. The gooey PCBs, a once-common coolant in electrical equipment, are a suspected carcinogen. The upper river is considered so polluted that health officials warn people not to eat the fish.



ASSOCIATED PRESS

Workers ready a barge May 4, 2011, for the General Electric Hudson River PCB dredging project in Fort Edward. Crews dredging a contaminated stretch of the upper Hudson River in New York dramatically picked up their pace in the third year of the massive Superfund cleanup.

This is the third year that crews have been dredging the upper Hudson since 2009 (with a year off in 2010 to analyze first-year results).

Officials with the EPA and GE said they have made progress in reducing the amount of PCBs stirred up into the water during the dredging.

However there were times when air monitors on the river measured high PCB levels. Dave King, the Environmental Protection Agency's coordinator for the project, said that the so-called exceedances happened during work on highly contaminated areas of the river and that crews managed to keep the releases to a minimum.

The decision to dredge was controversial in the rural towns north of Albany, pitting people who saw it as the best chance to clean up the river against those who said the dredging would

be disruptive and useless. GE, under former chief executive officer Jack Welch, waged an aggressive anti-dredging campaign for years, though the company has cooperated with the EPA since the agency ordered dredging in 2002.

While many environmental advocates continue to argue for dredging beyond the boundaries called for in the Superfund project, a number of them said they were pleased with GE's work.

"It took a while to get them going, but I'm very satisfied with the way they've proceeded," said William Koebeman, who represents the Sierra Club on the Superfund project's community advisory group.

After dredging ends for the season in the coming days, crews will be on the river for a few more weeks to backfill dredged areas.



Comment Period Extended on EPA's Proposed Cleanup Plan for the Grasse River Superfund Site in Massena, NY New Meeting Dates Announced

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Massena Town Hall
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Board Room #30
Massena, NY 13662

Public Meeting: 7 - 9 p.m.
Massena Central High School
Auditorium
84 Nighthengale Avenue
Massena, NY 13662

Akwesasne: Thursday, Nov. 15, 2012

Public Information Session: 1 - 3 p.m.
St. Regis Mohawk School
Multipurpose Room (Visitor's Entrance)
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Public Meeting: 7 - 9 p.m.
Office for the Aging - Seniors
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(518) 358-2240

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JEFFERSON COUNTY HISTORICAL SOCIETY

VICTORIAN FAIRE

Nov. 17th & 18th

ARTISANS, ANTIQUES, ARTS & CRAFTS



Jefferson County Historical Society Hosts

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Saturday & Sunday
November 17th & 18th
10am ~ 4pm

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- Complimentary Wine & cheese with admission Saturday 2pm-4pm

This is an Operation Yellow Ribbon Event including discounts for military & spouses and JCHS members.

Home-made baked goods at "Mrs. Paddock's Sweet Shop", holiday Wassail, a hot mulled cider and lunch will also be available for purchase. The museum will also have some special items available at the museum store, including ornaments, paperback histories about the North Country, reprints of historical Husted photographs from glass plate negatives, gifts with a Victorian theme and much more.

Admission is \$5 for adults; \$4 for JCHS members, military & spouses. Admission is free for children under 18 when accompanied by an adult. The Victorian Fair will be held at the 228 Washington St., museum. This annual event is one of the nonprofit organization's major fundraisers. For more information, contact the museum at 782-3491

For more information on the event or if you'd like information on becoming a vendor please contact Betty Dier at (315) 788-0454 during Museum hours or email director@jeffersoncountyhistory.org



Public Meeting Transcript

November 14, 2012

Massena, New York

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UNITED STATES OF AMERICA
ENVIRONMENTAL PROTECTION AGENCY

DATE: November 14, 2012
LOCATION: Massena, New York

1 Grasse River Superfund Site - 11-14-2012

2 (The meeting commenced at 7:00
3 p.m.)

4 MR. KLUESNER: I'm with the U.S.
5 Environmental Protection Agency based out of our
6 New York City office. And I am a community
7 involvement coordinator, public affairs person.
8 Community involvement coordinator assigned to this
9 project, Larisa Romanowski, had a baby girl last
10 night. She's obviously on maternity leave, so I'm
11 filling in for her. So we're very happy for her.

12 So the purpose of tonight's
13 meeting is to discuss E.P.A.'s preferred remedy for
14 cleanup of the ALCOA Grasse River Site. And that's
15 why, obviously, you're here.

16 There's a few things I want to
17 discuss with you before we get started. This
18 meeting is being transcribed. As required by law,
19 when we propose a cleanup plan, we are required to
20 hold a public meeting and to have a transcript
21 prepared to capture your comments and questions.
22 So to my left, your right, is Hannah. She is our
23 court reporter. I will be watching Hannah closely
24 so that if she needs a break, if she is looking

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2 like she needs us to slow down. We may ask you for
3 your -- for your name. You are not under
4 obligation to give your name in your comment at the
5 end of the presentation, but you certainly do so as
6 well.

7 what we do when we ask you for --
8 just, you know, to state your name, if you have a
9 specific question we would like to know who to, you
10 know, reply to. So that's why we ask the name, but
11 you're not -- under no obligation to give it. So
12 we have about a twenty-minute presentation. I'm
13 looking at our project manager, Young Chang, I'll
14 introduce in a second -- twenty or thirty minute
15 presentation max, and then we'll turn it over for
16 questions and answers. what we would ask you to do
17 is to hold your questions and comments until the
18 end of the presentation. However, if you have a --
19 a question about a particular slide that you
20 absolutely need answered before, you know, to -- to
21 understand what we're talking about, please raise
22 your hand and ask a clarifying question.

23 You know, obviously we're here to
24 provide information and to help you understand what

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2 we're proposing, so we don't want you to wait
3 twenty minutes and then not understand the crux of
4 the presentation, so. But if you have a comment,
5 hold it until the very end. Okay.

6 So that's basically the ground --
7 the ground rules. As you signed in, you were asked
8 to -- you know, if you wanted to provide a question
9 or comment and you were given a card. So sometimes
10 we have cards. At the very end of the presentation
11 Q's and A's we'll go through one, two, three in
12 that order. If you change your mind and you don't
13 have a card and you change your mind and you want
14 one, raise your hand, we'll give you a card, no big
15 deal. All right. So that's how that's going to
16 work.

17 So with that, I'll turn it over
18 to the project team. Young, I'd like to introduce
19 Young Chang, who is E.P.A.'s project manager for
20 the site. We have Dr. Marion Olson, our human
21 health risk assessor in the front. Pete Mannino,
22 a -- a supervisor in our Superfund program. Doug
23 Fischer is our attorney at -- at the sign-in desk.
24 And who else did we have? We have David with New

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2 York State. And, I'm sorry; your name again?

3 MS. McLAUGHLIN: Scarlett

4 McLaughlin.

5 MR. KLUESNER: Scarlett? Last

6 name?

7 MS. McLAUGHLIN: McLaughlin --

8 McLaughlin.

9 MR. KLUESNER: McLaughlin. All
10 right. From New York State. Thank you. Did I
11 miss anybody?

12 MS. YOUNG: No, that is it.

13 MR. KLUESNER: Okay. Thank you.
14 I think that -- I think that's it. Again, thank
15 you for coming out tonight. We really appreciate
16 it. We hope that you walk away understanding more
17 about what we're proposing. We welcome your
18 comments. The commentary runs through November
19 29th. There are comment cards out on the table in
20 back. If you don't want to make a comment tonight,
21 you can leave comment in writing.

22 There is also information sheets
23 out front that shows here's the information how to
24 submit comments by e-mail. So after tonight's

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2 meeting, we will -- or after the commentary closes,
3 we will reveal all the comments, all the questions.
4 We will prepare what we call a responsiveness
5 summary, so the comments that we receive, the
6 questions that we receive will be captured and --
7 and we will respond to that in a -- in a
8 responsiveness summary in the document.

9 So your input tonight can
10 actually change things. I've seen proposed plans
11 change after the public comment process, so we take
12 your comments seriously and thanks. I'll turn it
13 over to Mr. Mannino.

14 MR. MANNINO: Thank you, Dave.
15 So basically tonight's agenda, we have the
16 introduction from Dave. So after the introduction,
17 I'm going to discuss the Superfund process. That's
18 going to be followed by the site history and
19 background information, then followed by the
20 results of the investigation conducted at the site,
21 followed by a discussion of the E.P.A.'s preferred
22 remedy. And then, as Dave mentioned, just
23 mentioned, we'll have a question and answer
24 session.

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2 So let's get -- so let's get
3 started with the -- some background information
4 regarding Superfund. So basically toxic waste
5 disposal disasters prompted congress to pass in
6 1980 what's called the Comprehensive Environmental
7 Response Compensation and Liability Act, as
8 commonly known as Superfund.

9 And what Superfund does, it
10 provides federal funds to clean up hazardous waste
11 sites or to respond to emergencies related to
12 hazardous substances. It also empowers E.P.A. to
13 compel responsible parties to either pay for or
14 conduct the necessary response actions at as -- at
15 a Superfund site.

16 So let's talk very briefly
17 regarding the Superfund remedial process. When a
18 site is first discovered, it undergoes a
19 preliminary assessment and it undergoes a granting
20 process to determine whether or not the site is
21 eligible for listing on the National Priorities
22 list. Once that evaluation is completed, E.P.A.
23 will propose that site for listing on the National
24 Priorities list and will undergo a public comment

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2 period to determine whether or not there are any
3 adverse comments to that listing. Once the public
4 comment period closes and E.P.A. has evaluated all
5 of the comments that were received, the E.P.A.
6 makes a determination of whether or not the site
7 should be listed final on the National Priorities
8 list.

9 Once -- for sites -- once a site
10 is listed on the N.P.L. that enables the remedial
11 investigation feasibility study to start. What the
12 remedial investigation is -- is the purpose is to
13 define the nature and extent of the contamination
14 at the site. As part of the remedial
15 investigation, a risk assessment is also conducted
16 and the risk assessment evaluates whether or not
17 there's any unacceptable risks to either human
18 health or the environment.

19 The feasibility study evaluates
20 alternatives or technologies to clean up that
21 particular contamination that causes an
22 unacceptable risk. For sites that are not on the
23 National Priorities list, such as the Grasse River
24 Superfund Site, only enforcement lead actions can

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2 be taken at that site.

3 So once the remedial
4 investigation and the feasibility study is
5 completed, E.P.A. summarizes that information in
6 what is called the proposed plan. The proposed
7 plan also identifies E.P.A.'s preferred alternative
8 to address the contamination at the site. We
9 release the proposed plan for public comment and we
10 hold public information meetings, and we also have
11 formal public meetings to solicit comments from the
12 public.

13 And tonight's meeting is one of
14 two meetings that we're having for this site as
15 part of the public comment period which Dave
16 mentioned closes on November 29th. Once E.P.A.
17 evaluates all the comments that were received
18 during the public comment period, as Dave
19 mentioned, we prepare what's called a
20 responsiveness summary that is a written response
21 that each and every written and verbal comment that
22 is received during the public comment period.

23 That information is contained in
24 the record of decision which is E.P.A.'s formal

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2 document which identifies the selective remedy for
3 the site. Once the record of decision is issued,
4 the next phase is called a remedial design phase,
5 and it's in the remedial design phase that all of
6 the specifications, the work plans, and the
7 drawings are developed that outline how the actual
8 work will be conducted at the site.

9 And it's once that the remedial
10 design phase is completed that actual construction
11 activities can begin at the site. And that's
12 called the remedial action phase. During the
13 remedial action and subsequent to the remedial
14 action, there's typically long-term monitoring
15 that's conducted at the site. Additional data is
16 collected to evaluate whether or not the remedy is
17 functioning as an -- as intended.

18 And we periodically conduct
19 what's called five-year reviews, so a review that's
20 done every five years after the construction has
21 been initiated to confirm that -- as I said, if the
22 remedy is functioning as intended and the
23 objectives of the ROD are being achieved. Once
24 that criteria has been met, the E.P.A. would

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2 evaluate whether or not a site that's on the
3 National Priorities list should be deleted from the
4 National Priorities list.

5 And, once again, that's open --
6 there's a public comment period where E.P.A.
7 solicits comments from the public on that proposed
8 deletion process. But even after a site is deleted
9 from the N.P.L., there is still the five-year --
10 five-year review process where data continues to be
11 collected and monitored to ensure that the remedy
12 is functioning as intended. So that's a basic
13 overview of the Superfund process on the remedial
14 side. And with that, I turn it over to Young
15 Chang, the Remedial Project Manager. Thank you.

16 MS. CHANG: Good evening,
17 everyone. Thank you for coming out tonight. Can
18 you hear me okay? I've been told I have a big
19 mouth -- or a loud mouth.

20 We're here to today to talk about the Grasse River
21 Superfund Site. I will try to keep my presentation
22 brief so we have more time to listen to your
23 comments and to answer your questions.

24 The figure one that you see here
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2 shows the location of the Grasse River Superfund
3 site and also in relation to the Reynolds Superfund
4 site and the former G.M. Superfund site. The lower
5 Grasse River was excavated in the early 1900s to
6 allow for increased flow for the purposes of power
7 generation from the Power Canal and the Powerhouse.

8 As you can see from the upper
9 photo, that is the Powerhouse with the Grasse River
10 and it's actually the Power Canal that is being
11 excavated in that photo.

12 In 1902, ALCOA formerly known as
13 the Pittsburgh Production Company, had started
14 constructing an aluminum plant in Massena. ALCOA
15 continued to get its energy source for the plant
16 from the Powerhouse until 1958, when a much bigger
17 hydroelectric dam was constructed on the St.
18 Lawrence River, known as the F.D.R. Project, with
19 the Eisenhower Lock System and the Moses-Saunders
20 Power Dam. The same year, NYPA, New York Power
21 Authority, stopped operation of the Powerhouse on
22 the Power Canal, after which the Grasse River
23 started flowing much -- much -- very slowly.

24 Grasse River flows approximately point one feet per

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2 second. In comparison, the St. Lawrence River runs
3 approximately three feet per second, so it's
4 drastically slower, calmer river than the St.
5 Lawrence River.

6 It was also in the '50s that
7 ALCOA started using oil-containing P.C.B.s. So how
8 did the Grasse River site get contaminated? ALCOA
9 had historically discharged wastewater containing
10 oil and P.C.B.s into the Outfalls, the Unnamed
11 Tributary, and into the Power Canal. Oil
12 containing P.C.B.s were used by ALCOA from the '50s
13 to the mid '70s. And this explains why we see at the
14 Grasse River Site much higher concentration of
15 P.C.B. contamination towards the bottom of sediment
16 column and markedly less at the top.

17 The other reason why we see much
18 less contamination at the top is because -- because
19 ALCOA had conducted an extensive upland remediation
20 under the supervision of the New York State
21 Department of Environmental Conservation from the
22 order of 1985, thereby cutting off the upland
23 source of contamination into the Grasse River after
24 that job was completed in 2001.

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2 In 1989, E.P.A. issued an order
3 to ALCOA to investigate the ALCOA study area and to
4 develop cleanup alternatives and then to design and
5 implement the remedy that the E.P.A. selected -- or
6 E.P.A. will select in the future. In '91 ALCOA
7 started that investigation. In '95, E.P.A. amended
8 that order to include ALCOA to conduct removal of
9 approximately three thousand cubic yards of
10 sediment, boulders, and debris from the outfall
11 001, which was highly contaminated with P.C.B.s.

12 So the initial ALCOA study area
13 is much more expansive than the seven point two
14 mile of the lower Grasse River. From here to here
15 is the lower Grasse River that I will be referring
16 to, but the study area includes this whole area
17 including the upper portion of the Grasse River,
18 the Massena Power Canal, Robinson Creek, and the
19 Unnamed Tributary.

20 From 1991 to 2010, many studies
21 have been conducted to define the extent of the
22 contamination and to develop cleanup alternatives.
23 As shown here, many pilot studies and demonstration
24 projects have been also conducted in the river to

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2 evaluate various technologies and to gain
3 site-specific information.

4 As you can see, in 1995 the
5 Non-Time Critical Removal Action took place near
6 the outfall 001, which I spoke of. In 2001,
7 Capping Pilot Study was conducted in this region.
8 And it was during the monitoring of that Capping
9 Pilot Study in 2003 that we had discovered severe
10 ice jam events can occur in the Grasse River severe
11 enough to scour away sediment, including the
12 capping that was placed in 2001.

13 From that point, further
14 investigation was needed and it was started, to get
15 better understanding of the ice jam events and to
16 find out solutions to prevent scouring from ice jam
17 events. In 2005 we had conducted a Remedial Option
18 Pilot Study in these regions, which included some
19 portions of main channel dredging, some portions of
20 near shore dredging, near shore sediment capping
21 and also a smaller portion of armor capping in one
22 anchor area. The design for the 2005 Remedial
23 Option Pilot Study had included ice control
24 structure. However, it was not constructed because

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2 of significant opposition that we received from the
3 community.

4 In 2006, after the Cap Carbon
5 Pilot Study was conducted in this region. And not
6 shown on the figure, but in 2007 we have conducted
7 an ice breaking demonstration project throughout
8 the seven point two mile distance of the Grasse
9 River -- lower Grasse River. This is a figure
10 of -- or this is a photo of the March 2003 ice run.
11 This is a profile of -- of what a ice jam is, so
12 the broken pieces of ice that you saw earlier in
13 the previous photo flows from upstream Grasse
14 River, comes in contact with the solid piece of ice
15 cover in the lower Grasse River. They end up
16 collecting. More and more ice pieces end up
17 collecting creating a toe of ice jam. It's not the
18 chunks of ice that scours or gouges into the
19 sediment. It's really the reduced area from where
20 the water can flow through creating a higher force.
21 That higher force scours away the cap and the
22 sediment from -- the cap from the 2001 and the
23 sediment beneath and deposited the sediment further
24 downstream. So remember it's not the chunks of ice

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2 that gouges into the sediment. It's, rather, the
3 increased force that's created underneath the toe
4 of the ice jam that scours away and erodes the
5 sediment.

6 Here's another profile of the
7 Grasse River, showing the typical average width
8 showing four hundred to six hundred feet width.
9 Average depths of water depth in the main channel
10 is fifteen to twenty feet. These areas are what we
11 refer to the near shore, and the near shore is
12 defined as water depths of five feet or less.

13 In the main channel sediment, the
14 contamination -- the sediment depth is normally
15 about five feet depth. There are pockets of
16 sediment where it's greater than that, eight feet
17 to ten feet sometimes, whereas the contamination
18 within the near shore were mostly limited to a foot
19 to a foot and a half depth.

20 The other important thing to
21 remember with this figure is the bottom of the
22 sediment at the Grasse River main channel, we run
23 into hard pan and bedrock, and that plays a key
24 role in the success of the dredging of the main

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2 channel or why it's so difficult to be dredging in
3 the main channel at this site, which is very
4 different from some of the other sediment sites.

5 So the key findings from years of
6 investigation, P.C.B. are a concern for Grasse
7 River sediment. Eating contaminated fish from the
8 Grasse River site is the primary human health risk.
9 Ecological risk at the Grasse River site is also
10 unacceptable and driving remediation. Seven point
11 two mile stretch of the site is contaminated with
12 P.C.B.s, and P.C.B. contamination at this site is
13 widespread.

14 Sediment in the Grasse River is
15 stable except in the upper two miles where the ice
16 jam events can scour and potentially can occur and
17 potentially scour sediment, even sediment at
18 depths. The lower five miles of the Grasse River,
19 sediment is stable. It's the sediment at the
20 surface in the lower five miles that are a
21 continuing source of P.C.B. contamination to the
22 biota.

23 As mentioned previously, the
24 highest concentration of P.C.B. contamination in
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2 the main channel is found towards the bottom of the
3 sediment column, neither the hard pan and the
4 bedrock. This makes it difficult and we are unable
5 to over dredge in the main channel. In over
6 fifteen years P.C.B. levels in the small mouth bass
7 and brown bullhead have declined over ninety
8 percent, whereas the PCB levels in the spot tailed
9 shiner have decreased by fifty-five to sixty
10 percent. However, the rate of decline has
11 decreased. The fish are still contaminated, and
12 the New York State Department of Health still
13 advises not to eat the fish caught from the lower
14 Grasse River. The decline of fish levels and
15 the -- the decline of P.C.B. levels in the fish are
16 mostly due to the source control that took place on
17 land, upland remediation that was concluded in
18 2001.

19 So the seven point two-mile
20 section of the lower Grasse River, during the
21 investigation, was sectioned off by transects. We
22 have seventy-two transects. Every ten transects is
23 one mile distance, so seventy-two transects, seven
24 point two miles distance. This figure also shows

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2 the locations of the various pilot and
3 demonstration projects that had been conducted over
4 the years.

5 Ten alternatives, ranging from no
6 further action to all capping to all dredging were
7 evaluated. Also in between we have combination of
8 dredging and capping alternatives that were also
9 evaluated. Amongst the active alternatives, they
10 ranged from a hundred and fourteen million dollars
11 with three-year construction period to almost one
12 point three billion dollars with eighteen-year
13 construction period.

14 I'm not going to go through each
15 and every one of the alternatives. Instead, the
16 next slide I'm going to talk about the criteria by
17 which we evaluated those ten alternatives. So
18 the -- you see the nine criterias by which we
19 needed to evaluate the -- the ten alternatives.
20 The first two bullets that you see above are
21 threshold criterias, meaning that each of the
22 alternatives must meet these statutory requirements
23 in order to be selected. The next five, starting
24 from the long-term effectiveness and permanence, on
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2 down to cost, are balancing criterias where
3 detailed technical analysis is conducted and
4 compared. The last two, the state acceptance,
5 tribal acceptance, and community acceptance are
6 modifying criteria groups where formal acceptance
7 are assessed during and after the public comment
8 period.

9 So Alternative Six is this giant
10 poster we have here on my right, is the E.P.A.'s
11 preferred remedy. And after the proposed plan was
12 published, we also received concurrence from New
13 York State. So it is both E.P.A. and the New York
14 State's preferred remedy for the Grasse River Site.
15 The near shore is in the yellow. All of the yellow
16 in both is the near shore where contamination
17 equaling one part per million or greater will be
18 dredged out. After it's dredged out, the near
19 shore area will be backfilled, not capped, but
20 backfilled, the distinction being that dredging
21 will be fully achievable in the near shore and it
22 is not called capped because it's not there for
23 separation of chemical contaminants, but it's there
24 backfilled and brought back to grade for the

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2 purposes of habitat to bring back the area for the
3 habitat purposes. So it's backfilled after the
4 dredging.

5 The green in the T One through T
6 Twenty-one, the first approximate two mile is armor
7 capped with approximately twenty-five inches of
8 capping material which encompasses armor and stone
9 at the top. The lower five mile of the main
10 channel will then be capped with main channel
11 capping, consisting of twelve inches of sand and
12 topsoil. And when I said that this site, the
13 P.C.B. contamination is widespread, this is what I
14 meant. As you can see, all along the river the
15 seven point two mile, you see color, so some remedy
16 will be implemented pretty much bank to bank
17 throughout the seven point two. So that's what I
18 mean by widespread contamination.

19 Also the dewatered dredge
20 sediment will be disposed of on-site landfill. The
21 mound that you see on the ALCOA West property, that
22 will be expanded to accommodate the dredge material
23 that comes out of the Grasse River. Also the
24 habitat reconstruction will be done where

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2 disturbance had -- will occur as a result of
3 remediation.

4 Additionally, long-term
5 monitoring and maintenance will be conducted, not
6 only to ensure that the caps are in place and
7 functioning as designed, but also to monitor --
8 continue monitoring the fish, the sediment, the
9 water column. So these are the alternatives that I
10 had just discussed.

11 So in the recent forty-five days,
12 almost, since the comment period has been open,
13 I've been receiving many comment letters. And also
14 I've been reading several articles in the various
15 newspaper -- local newspapers, and there seems to
16 be a common theme. So I just wanted to discuss
17 those and add those to my presentation.

18 Some of those common questions
19 are why not dredge the main channel, too. Another
20 one has been can armor cap work, and the third is
21 why dredge the near shore if capping is just as
22 effective. So I'm going to discuss each of those a
23 little bit in detail.

24 So the first one, why not dredge

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2 the main channel too. Dredging in the main channel
3 will result in high residual concentration being
4 left behind. And that's what this figure shows
5 you. That's based on data that we gathered during
6 the Remedial Options pilot study in the work zone
7 one which was conducted in 2005. So the
8 concentration of the sediment, the average
9 concentration before the dredging happened in the
10 first three inches was four point one. After the
11 dredging had happened in the work zone one, they
12 went out and sampled again. The first top three
13 inches then after dredging was hundred and fifty
14 parts per million.

15 The other reason why it's
16 difficult is because the Grasse River main channel
17 has irregular and uneven river bottom, as can be
18 shown by the figure to the left. The darker blue
19 colors are deeper depth, so lower elevation. The
20 warmer colors, the yellows and the reds, are the
21 higher elevations, so they're closer to the -- to
22 the bank towards the near shore. And if you --
23 I -- I'm not sure if you're able to see it there,
24 but you can see the irregularity in this and

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2 different colorations showing that the bottom
3 conditions, this is the work zone one after it had
4 been dredged. You can see the irregularity in the
5 figure here.

6 And then to the right, you can
7 see the boulders and debris -- types of boulders
8 and debris that was excavated out of the work zone
9 one. Just to give you a scale, this is a tire.
10 Not a automobile regular sedan tire, but one of
11 those eighteen tractor wheeler giant trucks. I
12 don't know how big those are, but they're much
13 bigger than your typical tires on your car or my
14 car. And these boulders are bigger than that. So
15 these are the site-specific conditions which make
16 it difficult for dredging in the main channel.

17 So next comment question, can
18 armor cap work? Yes, it can. Armor cap was
19 designed using models to address turbulent flow
20 velocity, ice thickness amongst others, to protect
21 against scouring forces that are created underneath
22 the ice jam toe. Ice -- armor cap was successfully
23 placed in the Grasse River during the 2005 Remedial
24 options pilot study and it is still in the river.

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2 This is just a model -- a physical model of what a
3 armor cap components might look like. This photo
4 is actual underwater picture of the armor cap area.

5 This is in 2009 within that
6 one-acre armor cap area after four years of
7 sedimentation occurring on top of the armor cap.
8 So beneath this sediment is the armor capped with
9 stone, and it's still intact. Armor cap has been
10 used in rivers and lakes at contaminated sediment
11 sites to address erosional and scouring forces. So
12 while I'm not sure if other sites have used it for
13 the purposes of scour created by ice jam, I know
14 for a fact it has been used and effectively used at
15 other sites where they were trying to address
16 erosional forces. And basically that's the problem
17 we have. It's not the ice chunks. It's the
18 erosional forces created underneath the ice jam
19 toe. So armor cap works. And it has been proven
20 to work at other sites.

21 Question number three that I hear
22 commonly has been well, why dredge the near shore
23 is capping is just as effective. Well, capping in
24 the near shore in the Grasse River is not as good

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2 as dredging and backfilling it to grade. And ALCOA
3 has already demonstrated that it can successfully
4 dredge the near shore of the Grasse River. Unlike
5 the main channel dredging, near shore would not
6 need a cap after dredging. Remember, there's a
7 distinction for the near shore. After the dredging
8 of the near shore, it will be backfilled, but the
9 purpose of the backfill to grade is to bring back
10 the habitat type, not for the purposes, like the
11 main channel cap, which its purpose is to
12 separate -- have a chemical separation of the
13 P.T.B. -- P.C.B. contamination.

14 Lastly, dredging the near shore
15 will also remove some of the steep side slope that
16 we have seen which are difficult to cap. So the
17 figure, as I said earlier, this is near shore.
18 This is the main channel. This too is the near
19 shore. This is a side slope. When the near shore
20 is taken out, some of the side slopes that are
21 contaminated will also be taken out. And the
22 alternatives were that's not taken out then that
23 would need to be capped. But because of the
24 steepness of a side slope, it's very difficult to

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2 cap and will not be as effective.

3 So that is why Alternative Six is
4 the best alternative and the alternative that both
5 E.P.A. and the New York State recommends and
6 proposes to the public. Thank you.

7 MR. KLUESNER: Thank you, Young.

8 So, you know, I -- I think -- well, this bears
9 repeating in terms of the public comment. We do
10 rely on public comment to ensure that the input
11 from -- from you, the community, is -- is
12 considered and -- and, you know, responded to in
13 this process. Really, public input takes place
14 throughout the life of a project. Anybody can
15 provide us with input at any time. I think -- I --
16 I would like to think that we've -- we've done
17 our -- our homework and -- and that we've done our
18 job and have built that into what we are proposing
19 tonight. But tonight is -- is another opportunity,
20 a more formal opportunity for you to get your
21 comments on the record.

22 Again, as I said earlier in the
23 night, the comments will be responded to in what we
24 call the record of decision. That's the document

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2 that -- that sort of codifies what we're selecting.

3 And we'll respond to the comments in that document.

4 Okay. As I also said at the
5 beginning, we're accepting written comments on the
6 proposed plan through November 29th. There's a
7 number of ways that you can comment. Some of you
8 have comment cards. You can comment tonight. They
9 will be captured in the transcript that will be
10 made available to the public, you know, shortly.

11 There are comment cards in -- in the back. Some of
12 you have submitted comments already. You can mail
13 them in. You can e-mail them in. That --
14 that's -- that's -- you have a lot of ways to
15 choose from. All right. So November 29th and you
16 have all the information, and this information is
17 on a sheet out in the lobby, as well.

18 Okay. Before we turn it over to
19 Q's and A's, I'd just like, you know, some
20 acknowledgements, you know, that folks that we have
21 worked closely with throughout the years to come
22 to -- you know, to get to this point. St. Regis
23 Mohawk Tribe, the Environment Division, we will
24 have this same meeting tomorrow night in Akwesasne

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2 from seven to nine at the Office of the -- For the
3 Aging in Akwesasne, as well as a public information
4 session similar to what we had today at the town
5 hall.

6 I'd like to thank the New York
7 State Department of Environmental Conservation and
8 the Department of Health. We have some
9 representatives here tonight to help answer
10 questions. The National Oceanic and Atmospheric
11 Administration, NOAA, and the U.S. Fish and
12 wildlife Service, they're both federal trustees
13 that we work closely with on -- on our projects,
14 our remediation projects. They bring a lot to the
15 table. They have a lot of experience on natural
16 resource issues. And the Grasse River Community
17 Advisory Panel, I want to acknowledge them. And
18 then I -- we have a number of, you know, E.P.A.
19 contractors, you know, that work for -- for E.P.A.
20 and the Army Corp of Engineers and then ALCOA's
21 contractors, as well. And ALCOA is -- is
22 represented here and you'll hear from them here
23 shortly, so we'd like to acknowledge all of those.
24 And then thank our panelists that I introduced

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2 earlier.

3 And so we have a -- panelists
4 here to help answer your questions. I would like
5 to think that we can, you know, answer all your
6 questions, but perhaps not. I'll certainly try to
7 get answers to your questions. If we cannot, you
8 know, answer them tonight we'll get back to you and
9 through the responsiveness summary.

10 Okay. With that, before I turn
11 it over to the general Q's and A's, I would just
12 like to ask Mayor Hidy, the Mayor of the village of
13 Massena, if you would like to make comments.

14 You can. If the panelists want
15 to come up front and answer the questions, sure.

16 MAYOR HIDY: Well, before --
17 before I say anything, I -- I'd like to hear what
18 ALCOA's take is on this, as well. I think before,
19 you know, we can -- we can sit here and -- and just
20 listen to what the E.P.A. is going to suggest and
21 recommend, I think we'd all like to know, you know,
22 what is ALCOA's take. So I'd like to reserve if I
23 may until we hear from them.

24 MR. KLUESNER: Absolutely.

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2 Absolutely. That's actually -- before I move over
3 to ALCOA, just want to check with our stenographer,
4 Hannah. Are you okay? Okay. Great. Thanks.

5 All right. So with ALCOA is
6 Steve Rombough and he would like to make a couple
7 comments. Let me just check the mic here.

8 MR. ROMBOUGH: Good evening. My
9 name is Steve Rombough. I'm a manufacturing
10 manager here with ALCOA here in Massena. I'm
11 standing in, actually, for John Martin, who's our
12 plant manager and could not be here tonight. On
13 behalf of ALCOA, I'd like thank the E.P.A. for this
14 opportunity to provide comment and feedback on the
15 Grasse River plan. However, before I do that I
16 would like to affirm to everyone in this town hall
17 session and the community in general, that ALCOA
18 stands committed, dedicated, and cares a great deal
19 for this community. Folks that work at both the
20 East Plant, West Plant, our two business units here
21 in Massena consider this community their home.

22 So as such, I'd like to read some
23 of my thoughts and comments about the proposed
24 remedy. We've worked cooperatively with the E.P.A.

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2 and other agencies to study the river and
3 thoroughly investigate options for cleaning up
4 contamination in the river. We've spent an
5 enormous amount of time, energy, and resources to
6 ensure that there are no contributing sources of
7 P.C.B.s to the river. This work has resulted in
8 significant improvement and those P.C.B. levels in
9 the fish, as we mentioned, about eighty-five
10 percent reduction over the last fifteen years.
11 However, we do understand that further work in the
12 river is still necessary to continue that reduction
13 of P.C.B. levels in the fish. Based on years of
14 scientific study, ALCOA believes that a capping
15 remedy is protective of human health and the
16 environment, and will provide long-term viable
17 solution to the river.

18 After two decades of expert study
19 and input from many stakeholders, however, it's
20 time to move the process forward, ALCOA's prepared
21 to implement the remedy E.P.A. has selected. We
22 ask that E.P.A. move quickly to finalize the
23 recommended plan and then work with us to make the
24 most efficient use of those significant resources

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2 that will be invested in the cleanup of the river.

3 Thank you.

4 MR. KLUESNER: Thank you, Mr.
5 Rombough.

6 We can now go by the numbering
7 system, so let's -- if anyone has a comment or
8 question at any point and -- and they did not get a
9 card, you can -- you still have an opportunity.
10 They can give you a card and most likely it's going
11 to be an amiable process, but so -- everybody, we
12 want to make sure everybody has an opportunity to
13 be heard, so.

14 Number one is Mr. Hassig and you
15 have a one-page statement which you'd like to read.
16 If you'd just move to the microphone over there.

17 MR. HASSIG: Yeah, my name is
18 Donald Hassig. I represent Cancer Action New York.
19 This is a statement and the title of the statement
20 is Minimizing the Harm that will result from
21 P.O.P.s. And P.O.P.s are persistent organic
22 pollutants. They include the P.C.B.s that were
23 used and disposed of here with ALCOA. They also
24 include dioxins and the flame retardants that are

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2 still being used and part of the environment

3 because they were released into the environment.

4 So it's a large number of chemicals, including

5 P.C.B.s. Minimizing the harm that will result from

6 P.O.P.s contamination of the great basin of the St.

7 Lawrence River valley.

8 In 2010 the world Health

9 Organization, W.H.O., published persistent organic

10 pollutants impact on child health. This report

11 presents the research basis for concluding that

12 persistent organic pollutants exposures resulting

13 impose significant risk of developing diseases and

14 disorders including cancer, type two diabetes,

15 cardiovascular disease, autoimmune diseases,

16 obesity, cognitive impairments, behavioral

17 disorders, and reproductive impairments.

18 W.H.O. advocates for a worldwide

19 effort to minimize the exposures children receive

20 from P.O.P.s. The public health policies guidance

21 document named above can be accessed on the

22 Internet by using Google or another search engine

23 to search for 2010, comma, W-H-O, comma, persistent

24 organic pollutants impact on child health.

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2 Everyone who cares about the health of the
3 residents of the village of Massena and the
4 Akwesasne Reserve must read this document. It's
5 only fifty-eight pages long.

6 The residents of the village of
7 Massena have received POPs exposure in excess of
8 the average POPs exposures of the global
9 population. This is because a very large quantity
10 of P.C.B.s was disposed of on the surface of the
11 ground, In the Massena Power Canal, and in Grasse
12 River over the course of many decades beginning the
13 1950s. P.C.B.s of these sites evaporated and
14 entered the outer atmosphere or the wind blew from
15 the east, these P.C.B.s were present in the village
16 of Massena.

17 The first tenacious people who
18 resided in the Akwesasne Reserve located in the St.
19 Lawrence River valley east of the village of
20 Massena, New York have received exposure to POPs
21 that are far above the global population. This is
22 due to where Akwesasne is. Number one, 45:31.5 and
23 two, downstream P.C.B. contaminant sites located on
24 ALCOA West, the former Reynolds Metals facility,

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2 and the former G.M. Powertrain facility. Higher
3 than average P.O.P. exposure is also proof of
4 behavioral factors, including fishing and hunting
5 for local fish and wildlife, the historic dumping
6 of hazardous waste landfill that was used by G.M.
7 for decades.

8 It is the position of Cancer
9 Action, N.Y. that governmental and public health
10 entities, including the E.P.A. and the citizens of
11 must provide the people of the Akwesasne River
12 Reserve and the Village of Massena with a warning
13 of the P.O.P.s pose a health hazard Any strategy to
14 minimize P.O.P.s exposure must include educational
15 outreach to parents and children that are subject
16 to avoidable POPs exposure to health hazards
17 described above.

18 Government has thus far failed to
19 provide us warning. Corporate control of
20 government is the root cause of this failure. The
21 time has come for a science based effort to
22 minimize the harm that will result from P.O.P.s
23 contamination the Great Lakes Basin and the St.
24 Lawrence River Valley. Government must start

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2 warning the people of Akwesasne and the village of
3 Massena of the avoidable POPs exposure health
4 hazard now.

5 It is the position of Cancer
6 Action N.Y. that all industrial contaminants must
7 be removed from the soils and sediments of the St.
8 Lawrence River Valley.

9 MR. KLUESNER: Thank you, Mr.
10 Hassig.

11 All right. Number two. If you
12 would like to come to the mic, please. Thank you.
13 And if you wouldn't mind, if you're number three
14 and four, you might want to get ready.

15 MR. KRAMER: I'm Dale Kramer.

16 MR. KLUESNER: I don't really
17 like how that sounded.

18 MR. KRAMER: I don't know what
19 that means. I guess that's like maybe we should
20 try harder for your commercial. My wife and I are
21 residents of Massena. We are landowners on the
22 Grasse River. Our residence is marked by T
23 Fifty-four and T Fifty-five. We are in the, I
24 guess, the reach number seven. Our land is

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2 actually under the 1796 Indian Treaty, so some of
3 that, I guess, is somewhat controversial.

4 I want to go on record to say
5 thank you for all of your efforts. It's been
6 remarkable. We've been there eleven years. We
7 have watched ice. We have watched all manner of
8 studies done. We have watched all sorts of little
9 projects and orange cones and all sorts of things
10 out there and people to talk in the mornings who
11 are out there with barges and all manner of things
12 over the last eleven years, and we appreciate all
13 the effort.

14 My question, you -- actually,
15 Young, you've answered, but I'm going to just
16 address what the question was. You had it up there
17 in the last part. Little bit of background in
18 science, so I start delving into your Superfund
19 site stuff and I -- I couldn't quite get past while
20 we're not just doing Alternative Three. You've
21 answered that, you know, why we're doing
22 Alternative Six versus Three makes sense.

23 So I just want to go on record
24 again. Thank you very much for all the effort

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2 you've done. My wife and I have thoroughly enjoyed
3 living on the Grasse River, all five hundred and
4 seventy-four feet of waterfront that we have, and
5 the eight point eight one acres, and don't feel
6 threatened in any way. If you still want to go
7 with Alternative Three, that's perfectly fine with
8 us. But thank you, again, for all your effort.

9 MS. CHANG: Thank you.

10 MR. KLUESNER: Thank you.

11 All right. Person Number three? No number three?

12 MR. KLUESNER: Okay.

13 UNIDENTIFIED WOMAN: I wasn't
14 quite prepared, but can I go later?

15 MR. KLUESNER: You can go later.

16 WOMAN: Go out of order. Okay.

17 MR. KLUESNER: You can go out of
18 order

19 And, I know who you are. If you
20 can get ready and stand behind number four.

21 MR. O'CONNELL: Good evening. My
22 name is Robert O'Connell; I'm a lifelong resident
23 of Massena. And I'm here to urge the E.P.A. to
24 move quickly and support the proposed remedial

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2 action plan and I urge you to issue a record of
3 decision soon. As this solution is based on
4 science and I believe it should be based on science
5 and not on emotion or any punitive means, so I --
6 my family lives here now and I would like to
7 continue to live here. And we urge you to issue a
8 record of decision soon. Thank you.

9 MR. KLUESNER: Thank you.

10 MS. KRAMER: Good evening. My
11 name is Sue Kramer. I'm a twenty-year resident of
12 Massena and I have lived on the Grasse River for
13 over ten years now. And I just want to express
14 my -- I am very much in favor of this remediation
15 plan. I believe that this is the best thing for
16 those that live on the river, those that enjoy the
17 river, and also for my community. So I'm going to
18 ask that you please hurry up and proceed.

19 MR. KLUESNER: Thank you.

20 MR. TULGA: My name is Chris
21 Tulga. Both my wife and I grew up in this area,
22 moved back to this area recently. We are both in
23 complete and total support of the plan that was
24 provided. It's based on science. It appears to be

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2 the best option based on the studies that have been
3 done. That was decided when people who are experts
4 in that type of project and undertaking. And it's
5 a solution that will benefit the community as
6 far as ALCOA and the jobs it provides.

7 MR. COUPAL: My name is Frenchie
8 Coupal. I own Frenchie's Chevrolet in Massena. If
9 you look at the map where it says Grasse, I have
10 about a half mile of property on that property.
11 That's mine. I'm here to help you get this thing
12 over with. I've been on your advisory board for
13 twenty plus years and I've told you that before
14 even last year, let's get something going before
15 you retire. Remember that?

16 MS. CHANG: I remember you asking
17 me how old I was.

18 MR. COUPAL: You must remember.
19 Twenty years of study, we've done every tree, every
20 frog, every fish, every -- everything has been
21 done. Every rock has been turned over since -- in
22 the last twenty years. Jim Shaw and I are both
23 here. Tom Selner (phonetic spelling) has been on
24 this board for twenty plus years. We've been

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2 through everything that you've been through, and
3 you finally arrived at a plan, Number six, that
4 ALCOA probably can live with. We finally got it
5 done in twenty years. It's time. It's going to be
6 five more years before you even take a shovel. The
7 new plant will probably be started by then. That's
8 jobs. That's what we need. Please dig a hole and
9 let's get going.

10 MR. KLUESNER: Thank you.

11 Number eight. No number eight?
12 Let's go to number nine.

13 MR. LEVAC: Good evening. My
14 name's Steven Levac. My wife and I live on County
15 Route 42 which is Massena Center Road. And in
16 behind our property between two lots of our
17 family's property there is a ditch that was dug
18 years ago across 131 by the power lines and I would
19 like to know if there's any P.C.B.s that have been
20 spilled into that creek as that thing runs next
21 door into the Grasse River. And if there is any
22 P.C.B.s in there, are they going to dredge that out
23 of there? What are they going to do with it?

24 Number two, Massena Power Canal,
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2 I understand has P.C.B.s in there. And if this --
3 if they're going to cap this Grasse River and
4 here's water spills out of that canal twenty-four
5 seven, what happens after this Grasse River's
6 capped and that water keeps spilling out with more
7 P.C.B.s?

8 Are we robbing Peter to pay Paul
9 here, or are we going to do something with this
10 canal, get rid of it? Dredge that canal and what's
11 going to happen to it? Those are the two questions
12 I have.

13 MS. CHANG: Okay. First, could
14 you -- is your property somewhere --

15 MR. LEVAC: Yes, it's --.

16 MS. CHANG: -- on this figure
17 that you could come and show me?

18 MR. LEVAC: There's a store right
19 here, then when you turn left and go towards
20 Barnhart island, where the power line is, that
21 power transmission line, Power Authority, that goes
22 under the road, in the road right there, and then
23 you turn that two parts of our family's property,
24 comes into a giant ravine and then down in by the

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2 graveyard, down into the Grasse River.

3 MS. CHANG: So that, I will have
4 to speak to you further later to -- to see if that
5 was part of the area that was previously
6 investigated. And maybe, but I can't say for
7 hundred percent sure that we have sampled in that
8 area. Like I said, during my presentation, we have
9 previously examined, investigated not only the
10 Grasse River seven point two mile, but also the
11 upstream Grasse River and the Power Canal and the
12 Robinson Creek along with that main tributary.

13 MR. LEVAC: Okay. But it's my
14 understanding that ALCOA had -- had a large part in
15 digging this ditch a few years ago. It wasn't all
16 that many years ago that this was dug there.

17 MS. CHANG: Okay. But your
18 location, I'm not hundred percent sure, like I
19 said, so let -- let's discuss your particular
20 property after -- you know, after the meeting. You
21 can tell me exactly the location and then we'll
22 find out if it had been investigated, if there's a
23 cause -- if it wasn't investigated, if there's a
24 cause to investigate it or not. Okay. So that's

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2 first question.

3 Second question, you mentioned
4 the Power Canal and its contamination. Yes, you're
5 correct. Power Canal is contaminated. It has
6 contamination in the Power Canal. The volume and
7 the concentration of the contamination in the Power
8 Canal is very minimal in comparison to the Grasse
9 River -- lower Grasse River site.

10 One of the concerns that I've
11 heard about the Power Canal, if you don't do
12 anything. Well, first of all let me say, a
13 proposal for the Power Canal is continued
14 monitoring. We have been monitoring on an annual
15 basis. We've been monitoring the fish on an annual
16 basis. We have not been monitoring on annual basis
17 the water column and the sediment. I would like to
18 start monitoring the water column along with the
19 fish, continue monitoring the fish, but along with
20 the fish monitor the water column on a regular
21 basis along with better definition of the sediment
22 as well.

23 But the investigation we have
24 done thus far in the Power Canal shows that minimal

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2 concentration of contamination and minimal amount
3 of contaminated sediment within the Power Canal.

4 MR. LEVAC: So I guess my --.

5 MS. CHANG: However, we do have
6 fish that's contaminated and that's why there's a
7 fish consumption advisory that's placed by New York
8 State Department of Health.

9 MR. LEVAC: Okay. So my final
10 question would be if you cap this and the water
11 keeps spilling into the Grasse River, what does
12 that do with the cap and the P.C.B.s that are being
13 poured into the top of it?

14 MS. CHANG: Because of the
15 minimal amount of sediment that's contaminated
16 within the Power Canal, after the implementation of
17 our site, we suspect that is not going to cause any
18 detriment. However, during the monitoring, and it
19 will continue to be monitored at a minimum
20 annually -- below the Grasse River site it will be
21 monitored at a minimum annually potentially greater
22 than annually. During the monitoring if
23 contamination is seen elsewhere and if it's due to
24 the Power Canal, we will address that.

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2 After the implementation at the
3 Grasse River, we don't go away. We continue to
4 monitor the Grasse River. Okay? So if additional
5 contamination is discovered, we will address it,
6 and ALCOA will still be the responsible party to
7 address that.

8 MR. LEVAC: Okay. Thank you.

9 MS. CHANG: Okay. Thank you.

10 MR. KLUESNER: Thank you, Young.

11 MR. STENLAKE: Good evening. My
12 name is Jeff Stenlake. I've been a resident of
13 Massena for over thirty years and I just want to
14 voice my opinion that based on looking at the
15 various alternatives that have been presented and
16 knowing the amount of pilot studies that have gone
17 into the Grasse River by ALCOA in conjunction with
18 the E.P.A. and other scientific experts weighing in
19 that, my opinion is that the proposed remediation
20 plan is sound. It's based on data, scientific
21 principles, and provides a very balanced approach
22 that will provide an effective solution for
23 remediating Grasse River. I urge the E.P.A. to
24 move forward with your proposed plan. I think that

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2 would be the best for all, and it's extremely
3 important to our community and the surrounding
4 region. Thank you very much.

5 MR. KLUESNER: Thank you.

6 MR. SHAW: Thank you for the
7 opportunity to address you and I do have a -- a
8 written copy of -- of my comments. My name is
9 James Shaw. I've lived in Massena for forty-five
10 years. I'm the chairman of the Massena Electric
11 Board, retired from ALCOA for ten years now, after
12 thirty-five years in many professional positions.
13 My last position was environmental. I'm also a
14 licensed professional engineer.

15 I think some history of why are
16 P.C.B.s here helps people understand, but when I
17 started with ALCOA in 1960s, the company purchased
18 and used hydraulic fluid that were formulated to be
19 non-flammable. This was done to protect employees
20 from serious burns and fatalities that could result
21 from hydraulic systems developed a leak. This was
22 considered to be a good thing. The primary
23 ingredient in these to make them more nonflammable
24 was polychlorinated biphenyls, which today we call

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2 P.C.B.s.

3 P.C.B.s are also used in paints
4 and other coatings to avoid flammability in those
5 days. P.C.B.s -- excuse me -- as you can see for
6 the induction of P.C.B.s in the Massena operation
7 was done for safety purposes to protect the
8 employees. In the '70s, as we became more
9 knowledgeable of the chemical and environmental
10 impacts, we determined that P.C.B.s present
11 potential health risks.

12 The company began a concerted
13 effort to eliminate P.C.B.s for use in the oil and
14 in the plant. And then during the '80s and '90s,
15 ALCOA worked with the New York State D.E.C. and
16 they spent a significant effort and funds to
17 remediate the plant site of P.C.B. contamination
18 and eliminate any discharge of P.C.B.s in the
19 Grasse River.

20 As you are well aware, E.P.A.
21 designated the Grasse River as a Superfund site and
22 ALCOA has been studying the river for nearly twenty
23 years under the guidance of your agency and other
24 stakeholders. Finally a proposed remediation has

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2 been issued and we are here to comment. As
3 required, ALCOA has proposed to E.P.A. a number of
4 alternatives to clean up the river, an estimated
5 cost, and remedial benefits.

6 Many groups and individuals have
7 strong opinions on which and how these remedial
8 efforts should be implemented. It's always hoped
9 that a compromise can be reached and result in
10 general a final solution. I believe you have
11 reached that compromise in this case. I strongly
12 urge you to move forward with your record of
13 decision, recommending this alternative, and to
14 work to ensure that the engineering to accomplish
15 this alternative is appropriate, cooperative,
16 timely, and does not lead to specification.

17 I look forward to the issuance of
18 your record of decision for this alternative which
19 will then allow the community and a very important
20 employer, ALCOA, to move forward with their growth
21 and development plans. Thank you.

22 MR. KLUESNER: Thank you.

23 Number thirteen?

24 MR. LUCAS: My name is Donald

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2 Lucas. I'm a resident of Massena. I live within a
3 block of ALCOA and I consider my property to be
4 river view. I'm also a member of the St. Lawrence
5 County Fish Advisory Board and we've been following
6 this for quite a few years. This is my letter to
7 you.

8 I have been attending meetings
9 since 1989, first as an alternate on the
10 Remediation Acts and Planning Committee, whose goal
11 was to clean up the onsite properties within the
12 fences of the companies responsible for
13 contamination of not only the river but the
14 environment affected by chemicals delivered by
15 means of wind direction.

16 There is much to be celebrated
17 for what was achieved and that being all industries
18 were at a zero point discharge. Ponds and lagoons
19 were taken out. Storm drains on the property no
20 longer deliver contaminates to the river and smoke
21 stacks, though not completely stopped from
22 discharge, but greatly reduced, was the first
23 important step.

24 Now what is left is what has been
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2 deposited from ALCOA and others going back to 1910.

3 A new group of Massena residents was formed called

4 the Citizens Advisory Panel, which I have been a

5 member for over ten years. We were given an

6 education on what was required in regards to

7 limiting exposure to the general public. Many

8 methods were studied, dredging and capping the most

9 prevalent. My analogy of capping is that when the

10 cat goes to the litter box and does its business

11 and it starts to stink, you might cover or cap it

12 with more litter to stop the stink, but the cause

13 of the stink is still there.

14 The other option is to do

15 nothing, natural recovery, but this might be

16 seventy years or more before it will be safe to eat

17 the fish and reduce human exposure. And, of

18 course, the E.P.A. doesn't support natural

19 recovery.

20 Now comes dredging. In 1995,

21 there was an experimental dredging at the 0 One

22 outfall, the first spot affected by direct deposit

23 from the ALCOA property. This area had the highest

24 concentrations of contaminants. Clamshell buckets

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2 scooped up soil from the bottom of the river to be
3 treated and buried on ALCOA property or, if too
4 highly contaminated, carried to a hazardous waste
5 site outside of this county.

6 During this dredging,
7 contaminants were disturbed and re-suspended into
8 the water column. Contaminant levels in fish were
9 causing some -- some to suggest that this practice
10 be abandoned. But if you look at the science two
11 years later, it was found that the contaminant
12 levels in the fish brought to levels lower than
13 what they were before the dredging commenced.

14 when you talk about capping, you
15 hear about the concerns of ice scouring. That is
16 in the spring when the large pieces -- thick pieces
17 of ice from upriver flow downstream and accumulate
18 below the ALCOA bridge, where it jams up and
19 restricts the water flow to the point that the
20 force of it is redirected toward the bottom, and
21 the water washes away the capping.

22 This -- the solution to this is
23 called an armor cap. First you put down sand and
24 clay, then you deposit on top of that stone and

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2 rock. During the test dredging at the 0 One
3 outfall, ALCOA talked about the difficulty of
4 getting at the contaminants while dredging because
5 of cobbles and boulders. This gives me cause for
6 concern when you talk about dredging and capping,
7 because it -- and armor because if this method is
8 chosen and years down the road it was found to be
9 ineffective as in the placement of the armor caps,
10 the rocks and boulders create a condition that
11 would make it difficult if not impossible to remove
12 the contaminants.

13 How to clean up the threat to
14 public health has been going on over twenty years.
15 You have to ask yourself this question, why so much
16 time and money being put into this? It can't be
17 just because we can't eat the fish. It has to do
18 something with the high cancer rates and the
19 thyroid disease in the North Country. It must be
20 something pretty serious.

21 During this presentation tonight,
22 Young, I heard you suggest that armoring has been
23 very effective. The armoring in this process is
24 what causes me to be concerned because, as you put

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2 it, in -- on page fifteen of your presentation, you
3 talked about the ice scouring events being
4 categorized as happening every eight to ten years.
5 During our educational process with the citizens
6 advisory, when we were first brought up they were
7 talked about as being hundreds -- once every
8 hundred year events. And then --

9 MS. CHANG: No -- no -- no.

10 MR. LUCAS: -- then we had two
11 major scours.

12 MS. CHANG: I -- I have to stop
13 you right there to correct you. What we had said
14 it's a hundred-year event. It is not to say it is
15 only going to happen once every hundred years, so
16 the storm that we had recently in the northeast,
17 the hurricane, that flood event was supposedly a
18 hundred year event. These days these hundred year
19 events might happen more frequently.

20 I, in no way, nor did any of the
21 technical team, try to relate to you that the
22 event, when I say hundred year event, means same
23 thing as it's only going to happen once every
24 hundred years. We were very clear in sharing with

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2 you that the data shows that these ice jam events,
3 severe enough to scour away sediments, can occur --
4 based on data that we have, can occur anyway
5 between eight -- every eight to ten years.

6 So that's based on fifty years'
7 worth of data on various line of evidence. It
8 shows that it could occur currently anywhere
9 between once every eight to ten years.

10 MR. LUCAS: Okay. Now my -- the
11 point that I was getting at that in the past it had
12 been suggested of hundred years events, which as
13 you say -- you clarified that they happen more
14 frequently than that. My point is that during our
15 educational process, those were the things that
16 were alluded to and they were found to not be, as
17 you stated not correct. They are shorter time
18 periods.

19 Now what I -- what I'm getting
20 at -- my point I'm trying to make is there's been a
21 lot of things that have been looked at and opinions
22 have changed with the -- the amount of discovery
23 that's going on over the years. What I'm trying to
24 convey to you is that if we use armor and we find

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2 out that, say, the studies with events of
3 communities, the worms and the bugs and everything
4 that comes up through the river bottom, if they're
5 still delivering the contaminants that exist, if we
6 leave them there with capping, and we haven't truly
7 chosen an effective means by capping, what do you
8 do if you need to get at where the cause of the --
9 the problem is? Doesn't the capping exclude any
10 opportunity of ever taking it out and in?

11 MS. CHANG: First of all I do
12 have some objections with your choice of word
13 regarding alluding as if we had alluded that --

14 MR. LUCAS: I apologize for
15 that -- maybe wrong choice of words.

16 MS. CHANG: -- the hundred year
17 event, but I think I was clear enough so the public
18 here recognizes distinction between hundred year
19 events versus frequency of the ice warm -- ice
20 warm -- the ice dam events severe enough to scour
21 away sediments can occur every eight to ten years.
22 Based on data we have, that's the data we have so
23 far, and that's what we've been sharing, which is a
24 different topic from hundred year events. That's

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2 one.

3 Two, I believe your concern was
4 something about biota by what's going to happen was
5 the biota after the armor capping. Well, after the
6 armor capping we showed you -- I showed you a
7 picture where the sedimentation is occurring, so
8 the picture on the middle is the armor cap that was
9 placed in 2005. After four years, you could see
10 the area that's pictured on the right as a photo of
11 that same one-acre area. Four years later
12 sedimentation has occurred. The biota is within
13 that sedimentation on the top. Underneath is the
14 armor cap various layers, but biota are still
15 living and thriving within that muck that you see
16 on top of the armor cap. So that's one of your
17 concerns.

18 However, let's say for argument's
19 sake something happens. We place the armor cap in
20 the upper two mile. Something happens we need to
21 get it out. If there is a cause, there is a reason
22 to get it out in order to remedy something, it can
23 be taken out. These are not -- these armor cap
24 material is not the same as the other picture that

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2 I had shown of boulders. It's not of that size.
3 These are much smaller material, so it's not going
4 to be as difficult as taking out those debris and
5 giant boulders. These are of a very different
6 scale, much smaller. It's not going to be easy,
7 but it can be taken out if something catastrophic
8 happens and we need to get at it. It's possible.

9 MR. LUCAS: That answers my
10 question.

11 MS. CHANG: But that's not the
12 purpose. We would like to have a good solution,
13 good technical solution that's viable and
14 sustainable for the long term. So we're not
15 placing this armor cap or proposing to place it
16 with a mindset that, you know what, I'm going to
17 come back in a hundred years or somebody else and
18 they're going to take it out. That's not our goal.
19 Our goal is to put in a permanent solution for the
20 long term.

21 MR. LUCAS: Okay. That answers
22 my question and I thank you.

23 MS. CHANG: Thank you.

24 MR. LUCAS: One -- one last

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2 question?

3 MS. CHANG: I don't know. It's
4 up to Dave.

5 MR. KLUESNER: Oh, no. You're
6 fine.

7 MR. LUCAS: During the duration
8 of cap meetings, I keep suggesting of a
9 presentation that was given by the New York State
10 Board of Health to these in conjunction with the
11 D.E.C. and E.P.A. during the -- the remediation
12 action planning committee meetings they had back in
13 1989. There was a explanation given as to how
14 toxic waste sites were categorized one to five,
15 five being the least amount of concern to human
16 health. Number one was so immediately bad you had
17 to move people off the property, and that was a
18 comparison to Love Canal.

19 Now if you go into your records
20 of meetings during -- in fact, in 1989 the question
21 was asked to a representative of the E.P.A. what --
22 where does ALCOA stand as far as that categoration
23 from one to five? And if you check the records, we
24 were told that after Love Canal there was such

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2 widespread panic that no toxic waste site would
3 ever, ever, ever be categorized at number one again
4 because there was such widespread panic. People
5 were asking for their properties to be bought -- be
6 bought up miles away from Love Canal.

7 And then the -- the answer to
8 that question was finally given and the answer was,
9 and you can check the records that the scene was a
10 very, very, very, very strong number two. That's
11 after it was -- was explained that a number one
12 designation would never be given. I've been asking
13 for answers to that -- for an explanation to the
14 public for many years. And I hope that someday
15 some answers to that question will come. Thank
16 you.

17 MR. KLUESNER: Glad to take your
18 comment. Thank you. I have never heard of such a
19 designation one through five.

20 MS. CHANG: No. And -- and
21 that's one of the reasons why I -- I -- unlike this
22 meeting tonight, where we have a court reporter
23 recording everything so we can go back fifty years
24 from now if someone wanted to go back and look at

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2 what was said by various people and the comment or
3 such thing doesn't exist, no transcription from
4 1989 that you speak of exists.

5 And also, I'm not aware of back
6 in 1989 if we had that type of one to five ranking.
7 There was a hazardous ranking system previously.
8 During that ranking system, Grasse River Site
9 didn't need it, and that's one of the reasons why
10 it's not on the National Priorities List. However,
11 later E.P.A. had ordered ALCOA to do the
12 investigation, ordered ALCOA to also come up with
13 alternatives, also ordered ALCOA to design and
14 implement the remedy that gets chosen by E.P.A. So
15 they are obligated. They are liable, they meaning
16 ALCOA, to remediate this site. Regarding the
17 ranking, I'm not aware of the ranking.

18 MR. LUCAS: Young, if you would
19 check the records there were meetings --.

20 MS. CHANG: There -- there is no
21 record. That's what I'm trying to share with you.
22 I don't have any transcripts to go back to, to
23 check whoever the remedial project manager was back
24 then to check for that. And also, that type of

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2 ranking system of one to five did not exist.

3 MR. LUCAS: In 1989?

4 MS. CHANG: No, it did not, sir.

5 MR. KLUESNER: well, I -- I
6 think, you know, I've never -- I've been working
7 with the E.P.A. since 1987 and I haven't heard of
8 such a designation of -- you know, we can certainly
9 provide an answer to the, you know, responses
10 summary we will, you know, we will ask around it,
11 you know, at a minimum to see if there was such a
12 thing.

13 I do know though that the Agency
14 has gone through over the years -- many years ago
15 went through an exercise where we addressed the
16 worst sites first. We did assessments of every
17 site to determine their immediacy of impacts to
18 human health and the environment and those that
19 were the worst we were addressing first through our
20 emergency response and our removal program. So we
21 did go through that exercise, but there was no
22 designation of one through five of that -- of that
23 program.

24 MS. CHANG: No.

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2 MR. KLUESNER: So all right.

3 We're ready for Number Fourteen.

4 MAYOR HIDY: I found it on the
5 floor.

6 MR. KLUESNER: Oh, you found
7 fourteen on the floor?

8 MAYOR HIDY: Yeah.

9 MR. KLUESNER: Okay. I don't
10 know what happened to fourteen up there, but --.

11 MAYOR HIDY: I think -- quick
12 question to the -- to the panel. First of all,
13 I'll tell you being Upstate New York here, I would
14 recommend to any young person get in the study
15 business because obviously that's -- that's the --
16 that's the big business today is study business.
17 Whether it be the D.E.C. or E.P.A. or -- or any
18 other of these agencies that monitor church suppers
19 or anything like that. It's -- it's ridiculous up
20 here. And, you know, we're fighting for our
21 survival. Okay. I just want to point that out.
22 We're fighting for our survival up here, so your --
23 your option is -- is going to impact what happens
24 here.

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2 Obviously, it sounds like ALCOA
3 is satisfied with Option Six. Did I -- did I hear
4 that right? Somewhat satisfied with Option Six,
5 and that's the option that the E.P.A. is
6 suggesting?

7 MS. CHANG: Yes.

8 MAYOR HIDY: And the State also
9 has --

10 MS. CHANG: Concurred.

11 MAYOR HIDY: -- concurred with
12 that also. You've shown a -- a number of agencies
13 that you've worked with. Obviously, you're the
14 lead agency. Okay. You've shown to where the
15 state -- the State, the Tribe, and the community of
16 Massena, I would -- I would imagine, have to be an
17 exception --

18 MS. CHANG: And also Akwesasne.

19 MAYOR HIDY: I'm sorry?

20 MS. CHANG: Also Akwesasne.

21 MAYOR HIDY: And Akwesasne.

22 okay. I guess my question is being lead agency,
23 you're signing off on this, what would change your
24 mind from any other option out -- out there? what

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2 would change your mind to say, you know what, we're
3 going to look at Option Eight now or maybe Option
4 Three, but -- but what would change your mind,
5 being that you've already had the acceptance with
6 the State, you've already had the acceptance from
7 the community, ALCOA, what would change the mind
8 here?

9 MS. CHANG: well, currently the
10 comment period has not ended, so we -- we do need
11 to wait for the comment period to end because there
12 might be more comments being submitted. And that
13 comment period is going to end midnight or eleven
14 fifty-nine on November 29th. So that's the first
15 thing; you have to wait until then.

16 MAYOR HIDY: But -- but I'm
17 trying to -- I'm trying to grasp --.

18 MS. CHANG: we still have to wait
19 also for the Tribal's comments --

20 MAYOR HIDY: Okay.

21 MS. CHANG: -- on the proposed
22 plan. They had submitted to us and we have
23 communicated with them and consulted with them a
24 number of times regarding E.P.A.'s proposal. But

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2 after the proposed plan was publicly released, we
3 have not received a formal comment from the Tribe.
4 So we need to assess and review and consult with
5 the Tribe still.

6 MAYOR HIDY: Well, I -- I just
7 heard recently in a -- in a news interview with, I
8 think it was Mr. Jock, if I'm not mistaken, Ken
9 Jock --

10 MS. CHANG: Yes, sir.
11 Environment director.

12 MAYOR HIDY: -- that's he not
13 satisfied with this -- with this option.

14 MS. CHANG: Yes. Yes.

15 MAYOR HIDY: Okay. So I'm -- I'm
16 kind of wondering, you know, how -- how impactful
17 the tribal environmentalists will be in your -- in
18 your decision making there.

19 MS. CHANG: For E.P.A., the
20 tribal acceptance is equal to a state's acceptance.
21 So --

22 MAYOR HIDY: Well, what about --
23 what about Massena acceptance?

24 MS. CHANG: -- so they do not

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2 have any more or less weight in our consideration.

3 In same light, the community acceptance is equal
4 for the community members of Massena as well as the
5 community members of Akwesasne.

6 MAYOR HIDY: Okay.

7 MS. CHANG: So I was just
8 covering with you the various items that we are
9 still waiting on, the comment period to end,
10 November 29th, and we are still waiting on the
11 Tribal comments.

12 MAYOR HIDY: Okay.

13 MS. CHANG: And also we have
14 public meetings tomorrow at Akwesasne, so that also
15 has to happen. And after that, you know, it really
16 is up to our regional administrator as to -- if
17 there is any reason, based on the comments that we
18 receive, to change anything.

19 MAYOR HIDY: Yeah. Okay.

20 MS. CHANG: I -- I --.

21 MAYOR HIDY: It just -- it makes
22 you wonder after -- after all this, you know,
23 again, going back to what -- what we tried to do on
24 the Grasse River with draining the hydro dam and --

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2 and trying to fix -- plug a hole that's been here
3 for over a hundred and some years, you know, that
4 we're dealing with these agencies, and you kind of
5 wonder where we are on the food chain anymore, you
6 know.

7 MS. CHANG: So far --.

8 MAYOR HIDY: Has a spotted snail
9 taken over to where we're down here and, you know,
10 it just --?

11 MS. CHANG: No; you're -- you're
12 still human and you are very high in that food
13 chain.

14 MAYOR HIDY: That's -- that's
15 good to hear. That's good to hear.

16 MS. CHANG: And -- and I would
17 like to share with you that I received many
18 comments from members of Massena community. And
19 it's been pretty much the support that you have
20 relayed to us during this oral comment period as
21 well. So I have many comment letters back in my
22 office that I've received from Massena community,
23 saying that they support the Alternative Six.

24 And also what I've heard

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2 repeatedly is now get moving, start doing the work.

3 I also repeatedly hear that we are concerned in

4 Massena and we -- we want ALCOA to stay and, you

5 know, that's at the forefront that many Massena

6 members --.

7 MAYOR HIDY: It's -- it's the

8 last lifeline that we have here.

9 MS. CHANG: I understand.

10 MAYOR HIDY: Okay.

11 MS. CHANG: Yes.

12 MAYOR HIDY: That's -- that's the

13 big thing. Okay. Thank you.

14 MS. CHANG: Thank you.

15 MR. KLUESNER: Thank you. Let me

16 just expound on what Young said and we -- your

17 request -- to answer your question in terms of what

18 information. I mean, it -- it is conceivable that

19 someone could come forth with some type of

20 technical new information that the -- that really

21 changes things. It's rare, but it -- it -- it's,

22 you know, it's possible.

23 And then the two criteria that

24 Young has already gone through, the State

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2 acceptance and community acceptance. Those are
3 what we call the modifying criteria. Of all the
4 criteria and the balance, and those are two
5 modifying criteria I have seen remedies modified
6 based on public comment during this comment
7 process. So this is not a -- a pro forma, just get
8 through it, rubber-stamp it. We take it seriously.

9 If you've done a -- a good job of
10 assessing the community, working with your
11 community, the fact that most of you know Young
12 over the years and, you know, it tells me that you
13 have had many opportunities to provide input
14 leading up to this point so that we -- you know, we
15 feel we tried to incorporate your concerns and
16 comments in this proposal, so.

17 MR. ALMASIAN: Good evening. My
18 name is Michael Almasian. I'm the executive
19 director of the Business Development Corporation
20 for Greater Massena. I am here to support the
21 option that you recommend. I believe it is
22 supported by science, and I want to stress that any
23 final solution that does not result in a modernized
24 ALCOA is no solution. Not for us. Because it

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2 won't matter if the fish are contaminated or not,
3 there won't be any -- anyone here to catch them or
4 eat them. I concur with Mayor Hidy's comments that
5 the presence of ALCOA is the lifeblood of this
6 community.

7 Now I'm not here merely to be in
8 the amen chorus for ALCOA or the proposed plan, but
9 I do believe it supported by science. I have
10 reviewed the various websites and the various
11 P.D.F. reports, and clearly your due diligence is
12 astounding, to your credit.

13 I've also researched the issue of
14 P.C.B.s. Most people don't know there are two
15 hundred and nine chemicals that make up P.C.B.s.
16 And one of the things I find most interesting and
17 it might relate to what Mr. Lucas had to say,
18 currently there is growing science on
19 bioremediation where certain microbes are designed.
20 There's a promising fungus that's being designed
21 that might, if P.C.B.s are found to be more
22 poisonous than contemplated, bioremediation could
23 be used even with the presence of the armored cap.

24 Further vis-a-vis ice scour, I
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2 was at some of the meetings involving the ice
3 pylons and the community reaction to that. It does
4 strike me, given the topography of the Grasse River
5 that leads to the upper Grasse River, that ice
6 might be able to be managed either to prevent jams,
7 to hold jams above polluted site, or to steer the
8 ice towards the shore and prevent the issue from
9 scouring. But all these things aside, and clearly
10 what you've done here with the armored cap and
11 the -- the photo of the sediment overlying it in a
12 mere four short years, I do support the option and
13 I recommend you come to a record of decision
14 quickly and so that ALCOA can plan and budget its
15 future and hopefully modernize its facilities.
16 Thank you.

17 MR. KLUESNER: Thank you.
18 Number Three, Yes. Sorry to refer to you as
19 number three. I don't --

20 MS. PRUDHOMME: No -- no.
21 That's -- that's what it's all about. So this is a
22 question. I'm interested in health and the human
23 health impacts and how that would be --.

24 MS. CHANG: Could you state your
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2 name, ma'am? Could you state your name?

3 MR. KLUESNER: Your name. Your
4 name, please?

5 MS. PRUDHOMME: My name is Relani
6 Prudhomme. And I do not live in Massena, but I
7 work in a clinical setting and we serve the six
8 counties here. And so it may be a question for
9 Department of Health and I'm just curious to
10 know -- just for background information, my
11 understanding and interpreting things then what
12 sources are used to show that P.C.B.s are
13 significant, I think you call chemical concern, is
14 that the correct? Chemical concern? And -- and
15 what other like facts and then maybe other
16 persistent hazardous waste is there anything else
17 besides that sediment P.C.B.s that you're actually
18 focused on containing with this plan?

19 MS. CHANG: So I think -- Marian
20 would you like to --?

21 DR. OLSEN: Do you want to go
22 first or --?

23 MS. CHANG: well, I'm just going
24 to briefly state that the initial investigation,
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2 the river investigation, like I said, included more
3 than the seven point two miles. So initially, they
4 went to a much larger area to investigate where the
5 contamination was. And in the initial
6 investigation it included analysis beyond P.C.B.
7 because they didn't know to start off with what the
8 contaminants were. So they analyzed for a full
9 sweep.

10 During that initial investigation
11 they had discovered, yes, there were a couple of
12 hits here and there of non-P.C.B., some metals,
13 aluminum -- makes sense with a aluminum plant, so
14 there were a few other contaminants. With that
15 information then the initial risk assessment was
16 calculated.

17 During that initial risk
18 calculation the baseline drifts assessment, it was
19 determined that the P.C.B. was the prominent
20 contaminant that's constantly a hit in the analysis
21 and also is causing a risk in both human health and
22 the ecological risk assessment.

23 And, Marian, I'm going to turn it
24 over to Marian, our E.P.A. toxicologist, Dr. Olsen.

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2 MS. PRUDHOMME: I'll just ask --
3 finish ask -- just touch on some points. I was
4 wondering about the sources that you used to --
5 that -- that you agree on or the State and, yay,
6 ALCOA or whoever's agreeing on it that you agree
7 that shows the -- the substances are -- are
8 associated with human health impacts, they're
9 significant. I know that there's a hazard index
10 that was developed and I'm wondering because there
11 were different estimates and things you used in
12 terms of how hazardous they are, how high of
13 amounts you're finding, and then what are people's
14 typical exposures for all kinds of estimates.

15 But I was wondering if the
16 Department of Health was going to be involved in
17 sort of an ongoing -- or have you already been like
18 doing this sort of a surveillance of actual numbers
19 of any, you know, comparisons of the broader
20 population and this population, in looking
21 specifically at conditions that would be associated
22 that are -- that are established that they're
23 associated with these chemicals? Or, you know,
24 what would that look like as far as like an ongoing

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2 using, you know, actual data from our area in terms
3 of diagnosis and things like that, incidents.

4 Thanks.

5 DR. OLSEN: Okay. Let me -- let
6 me just start by giving a little bit of
7 perspective. In -- at E.P.A., under the Superfund
8 program we conduct a risk assessment. And the risk
9 assessment includes four steps.

10 The first step is hazard and
11 that's where we looked at whether the chemical has
12 a potential to cause cancer or other non-cancer
13 health events. P.C.B.s are a very well studied
14 chemical. To have them classified by E.P.A. as a
15 probable leading carcinogen. What that means is
16 that we have suggested evidence. We have strong
17 animal evidence and suggested evidence from humans,
18 but the classification is based primarily on
19 adequate evidence from the animal studies.

20 We also looked at non-cancer
21 health effects. And, again, P.C.B.s are well
22 studied. There are over ten thousand studies.
23 About two thousand or more studies were done on
24 populations, primarily workers. And what they

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2 found was they -- they looked at studies that were
3 conducted in monkeys and these were conducted back
4 in 1980s.

5 The next part of our response.

6 At what level do you expect to see these effects?

7 So we developed a -- the cancer slope factor and it
8 gives us a relative indication of the potency of
9 P.C.B.s. Some chemicals are more toxic in P.C.B.s
10 and others are less toxic. So the cancer slope
11 factor gives us a relative understanding of that.

12 For non-cancer and this is the
13 level that was developed protected of new
14 populations and we compare the difference that we
15 find from exposure to the population here and look
16 at where they were above which is our goal of
17 protection or for below.

18 The next component of the
19 assessment is exposure. How do people come into
20 contact with the P.C.B.s? So they looked at fish
21 studies. We looked at fish consumption rates and
22 we came up with estimates of how much fish
23 individuals are eating as a community based on the
24 type of fish that were found.

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2 we also looked at recreational
3 groups. Someone going down to the river, wading in
4 and swimming, those types of activities. And what
5 we found was that exposure was greatest from
6 exposure to fish because of the way P.C.B.s and the
7 frequency of which individuals are consuming fish.
8 For the assessment we looked at an ingestion rate
9 of about thirty-one -- fifty-one half pound per
10 year. So that was the level we looked at as our
11 rate for determining cancer risks development.

12 As part of this analysis, we also
13 looked at the question of what are the
14 uncertainties. And those were also discussed in
15 risk assessment. E.P.A. has a process called the
16 integrated risk information system and what that is
17 is a database that provides E.P.A.'s consensus
18 analysis of the toxicity of chemicals. This
19 analysis involves a request to studies, a thorough
20 review of the literature, and a determination
21 regarding the toxicity values classification.

22 This is externally. There are
23 public meetings where individuals can submit to
24 comments to E.P.A. and participate by phone or in

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2 person and have an opportunity to provide
3 information.

4 The recent assessment process
5 allows us to look at the concentration, the
6 exposures, and toxicity and we come up with a risk
7 and a hazard. We're looking both currently and
8 into the future. We are basing this analysis, as I
9 mentioned as part of the toxicity assessment, on
10 studies that happened on the populations, but we
11 are not conducting epidemiological studies.

12 MS. PRUDHOMME: Okay. That's
13 what I was asking, yeah.

14 DR. OLSEN: Yeah. The New York
15 State Department of Health does maintain a tumor
16 registry and other registries in more detail where
17 they are looking at recent disease and incidences
18 across the state and compare with the statewide
19 averages. So that is another source of information
20 is with the Department of Health and could provide
21 you with more information or if you'd like to give
22 me your name, I'll be happy to send you contact
23 information as well.

24 MS. PRUDHOMME: Yeah, that would
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2 be great. And I -- so then the whole -- looking at
3 epidemiological studies I feel like it would be
4 kind of the other side of the coin to see, you
5 know, this is what we thought was going to happen.
6 Did it work? You know, are we actually reducing
7 impacts. You know, and I don't know how
8 significant that impact was and how difficult it is
9 to really determine in a small population rural
10 area, you know.

11 Are you talking about one in a
12 million people, you know, might get cancer from it
13 or -- and, you know, I don't know if there's more
14 of an education campaign and that -- that -- that
15 is for part of this in terms of the health aspects,
16 you know -- you know, equal if you have such and
17 such condition, if you should check into it and we
18 need to eat less fish and --?

19 DR. OLSEN: You know, we strongly
20 support the New York State Department of Health's
21 recommendations which is the advisory on the Grasse
22 River and we provide information about that on our
23 web page, so that's easily assessable. As you
24 mentioned conducting epi-study -- but the issue --

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2 the issue of efforts in the published literature so
3 they are aware of worker studies and other studies.

4 MR. KLUESNER: Okay.

5 MR. PEASE: My name Daniel Pease.
6 I'm a local attorney and the president of the
7 Business Development Corporation. We've had some
8 speakers who have thanked the E.P.A. for their
9 efforts in bringing the information together for
10 the meeting tonight. I wanted to take a further
11 opportunity to thank ALCOA for their cooperation.
12 We know that they've spent in excess of sixty
13 million dollars to fund the studies and the work
14 groups that you put together to put this
15 proposal -- to bring it to the stage that it's at
16 now. And I'm gratified to see that Steve and Jim
17 were here tonight to say that ALCOA was interested
18 in the same proposals that the E.P.A. is
19 recommending and that the State has accepted.

20 Massena has many challenges.
21 Everybody here firmly believes that the Town of
22 Massena's entitled to an environment that's safe
23 for their families and their -- their coworkers.
24 But we also have a need for jobs and ALCOA has a
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2 need for an economic certainty, and that as soon as
3 we can get this process decided, the record of
4 decision filed, give them a number that they can
5 work with, perhaps they can move on to the next
6 matter, and that's modernizing the East plant.

7 I support the proposal put
8 forward by the E.P.A. I believe that based on the
9 science and the current level of technology that
10 it's probably the best that we can hope for for
11 making the Grasse River safe. I appreciate the
12 fact that the -- the banks of the Grasse River are
13 going to be preserved for recreational use and for
14 habitat. The fact that it's not capped, it's
15 dredged and back -- backfilled, will allow the
16 local property owners to put docks in, make
17 recreational use of the river without impacting the
18 capping.

19 Dredging the center, I tend to
20 agree that it would not be a complete remedy and
21 would be ridiculously expensive in relation to the
22 benefits. And I believe that the -- the
23 proposition put forward today is a proper
24 combination of -- of the benefits and -- and

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2 rewards and costs and I would urge the E.P.A. to
3 move forward as quickly as possible. Thank you.

4 MR. KLUESNER: Thank you.

5 Number seventeen? Okay. Number eighteen?

6 MR. CURRY: Hi. My name is Don
7 Curry. I'm -- I've been a resident of Massena for
8 the last twenty-five years and I follow this
9 somewhat. I worked for General Motors a few years
10 ago and was involved in the initial studies that
11 happened there and -- and have worked to try to
12 alleviate their -- and I have not matched those of
13 the ALCOA remediation project but I'm so impressed
14 with your willingness to move forward and to invest
15 in what it's going to take to actually cap the
16 river. And the fact that we've had such a
17 reduction the last twenty years just from time
18 ninety percent in one study and ninety-five percent
19 for another.

20 So I'm just -- I just think we
21 need to move forward now. It's time for our
22 community to move forward and really I don't know
23 if you understand because you're not here how
24 important it is to expedite that process. So I

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2 would just thank you for this opportunity to speak.

3 Thank you for hearing the comments from our

4 communities and I would just strongly urge you to

5 keep moving forward as expeditiously as possible.

6 Thank you.

7 MR. KLUESNER: Thank you.

8 Just as a point -- I thank you if

9 you could come up.

10 MR. LACLAIR: Hi. Dave LaClair,

11 Jr. I'm the president of Local 450 the United

12 Steelworkers. I represent the members who work at

13 the ALCOA East facility. We'd like to express that

14 we're happy with the decision you put forward. We

15 support that decision, the Option Six. We would

16 also ask that you expedite your decision as it does

17 deal with modernization of our facility, the

18 protection of eleven hundred jobs here. And in

19 saying that, I would also ask that your decision be

20 tied to those eleven hundred jobs because I'm also

21 a community member. I was born and raised here. I

22 spent over half my life watching all of this with

23 the Grasse River remediation and the contamination

24 on it. It's nice to see that a proposal's finally

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2 put forward, that they can move forward and do
3 things with it. That's it.

4 MR. KLUESNER: Thank you.

5 MR. GRAY: Good evening. My name
6 is Joseph Gray. I'm the supervisor of the Town of
7 Massena. Thank you for the opportunity to speak
8 tonight. Thank you to the E.P.A. and the other
9 stakeholders for the work you've done thus far.

10 The Massena Town Council met this
11 evening in a special meeting in a couple matters
12 and one of the matters was to pass a resolution in
13 support of the Grasse River cleanup plan that
14 benefits our community by using sound science and
15 research to responsibly remediate our river as
16 quickly as possible while allowing ALCOA's Massena
17 operations to remain economically viable and
18 profitable.

19 It is vitally important that the
20 E.P.A.'s regional director issue a final decision
21 on the Grasse River cleanup as quickly as possible
22 after the public comment period ends. We are
23 worried about the environmental health of our
24 river, but we are also, likewise, very concerned

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2 about the hundreds of jobs provided by ALCOA to our
3 region.

4 Moreover we believe the cost of
5 the final cleanup decision will have a direct
6 impact on ALCOA's corporate decision to commit some
7 six hundred million dollars to modernize the
8 company's East plant to secure its footprint in our
9 community. As one of the other speakers said
10 earlier, ALCOA was following industry standards
11 when they used P.C.B.s for several decades. They
12 didn't break the law. They didn't intentionally
13 pollute our river. It happened. They're willing
14 to step up to the plate and -- and correct the --
15 the problem that was created and E.P.A.'s
16 identified a decision that seems acceptable to many
17 people.

18 As everyone has said before, we
19 need to move this thing forward as quickly as
20 possible. And on behalf of the Town Council and
21 the citizens of Massena, I urge E.P.A. and the
22 regional director to do that as quickly as
23 possible. Thanks very much.

24 MR. KLUESNER: would you like to
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2 come and get the letter?

3 MR. GRAY: I'm going to have --
4 I'm going to have a letter to just to kind of
5 remind you what I was going to say.

6 MS. CHANG: Okay.

7 MR. KLUESNER: Oh, okay. Thank
8 you.

9 MR. GRAY: Thank you.

10 MR. FLEURY: My name is Vance
11 Fleury. Actually I was number fourteen, but I got
12 the other side of 131 and I built a residence along
13 the Grasse River. I strongly support the plan that
14 they've come up with. Again, I don't think
15 throwing any more money at this is going to make it
16 any better, so I strongly urge you to move forward.
17 Thank you.

18 MS. CHANG: Thank you.

19 MR. KLUESNER: Thank you.

20 MR. KADER: Charles Kader,
21 Massena. My wife is a Massena landowner. I am
22 submitting my personal comments for the record
23 pertaining to the ALCOA Massena Grasse River E.P.A.
24 cleanup. I support the remediation to the highest
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2 level possible at any cost required to do so by any
3 parties involved.

4 The recent public comments
5 concerning the regional watershed cleanup by the
6 Village of Massena, Mayor James Hidy, and Village
7 of Massena trustee Timothy Ahlfeld deserves a
8 dissenting voice. To do anything less than the
9 finest cleanup possible is shortsighted, mean
10 minded, and speculative at best. Their neighbors
11 living -- (break in the audio at 9:45) -- down
12 river of Massena deserve to see this cleanup done
13 the right way, a right to a wrong from an earlier
14 time but also a way to send a signal to neighbors,
15 friends, and allies.

16 The Town of Massena was formed in
17 1802. Not coincidentally, the same year that the
18 St. Regis band of Indians Tribal government was
19 established. Before these trustee governments were
20 formed, people here coexisted on this same Grasse
21 River in friendly, neighborly ways. Who would want
22 to upset that apple cart? Massena benefits from
23 being located ten miles closer to Akwesasne than
24 does Malone, New York. The commercial and retail

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2 numbers make this clear. Yet, I have had citizens
3 of Massena ask me to support a short-term fix to a
4 long-term problem.

5 The speculation of ALCOA having a
6 set amount in mind to spend on either the cleanup
7 or the plant modernization should come to a halt.
8 ALCOA can end this empty debate of headlines and
9 conjecture by making clear what their bottom line
10 is. They must be asked by a coalition of
11 interested parties how much is in the budget to get
12 this done. That is what neighbors do. They talk
13 to each other. Then and only then can we move on
14 from this habit of not worrying about the people
15 downstream no matter how many are living there.
16 This is a quality of life issue centered on
17 fairness.

18 Was it fair for New York State to
19 allow ALCOA to be built where it ended up being
20 built, upriver from an Indiana reservation full of
21 people that were not citizens? There will not be
22 another federal government G.M. bailout to allow
23 local corporate interests to slip out the backdoor
24 and escape the burden of environmental

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2 responsibility. This entire part of North America
3 has been subjected to corporate environmental
4 terrorism. Look at the statewide cancer rate
5 comparisons.

6 When the St. Lawrence valley was
7 previously known for industry in the historical
8 fact books describing New York State, it is now
9 known for illness and P.C.B.s. There are many ill
10 affecting the North Country. I do not wish to add
11 indifference to the effects of the pollution. The
12 residents of Akwesasne and others down river
13 deserve better treatment than acquiescence to
14 unknown variables. How many of them have
15 employment with ALCOA? How many in Massena still
16 currently do? North Country industry is no longer
17 a backbone economic segment. That critical mass
18 has been lost. A quick Grasse River fix will only
19 serve to sever one more tie between Massena and
20 Akwesasne, which is the real economic engine now.
21 Do not be penny wise and pound foolish. Thank you.

22 MR. KLUESNER: Thank you.

23 All right. That's -- that's it
24 for the number cards. A show of hands for those

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2 that had comments or questions. Okay. We just got
3 to get -- yes, sir. Come on down and get to the
4 mic.

5 MR. O'CONNELL: Good evening. My
6 name's Dave O'Connell. I'm a lifelong resident of
7 Massena and I'm now full retired. And this is my
8 immediate family have been employed at ALCOA since
9 1927 and I would certainly hope that implementation
10 of this plan will further let other community
11 members and other families to have the same
12 opportunity that I did. I fully support the plan.
13 I have a home on the Grasse River and I think the
14 plan is certainly well engineered and is a cost
15 effective way to remediate and solve the problem.
16 Thank you.

17 MR. KLUESNER: Thank you.

18 MR. WARD: My name is Jim Ward.
19 I'm the Assistant General Manager for St. Lawrence
20 Gas. On behalf of St. Lawrence Gas, I would like
21 to express our strong support for ALCOA and our
22 strong support for this project. Me, personally,
23 I -- I'm a lifelong resident. I plan to be here
24 the rest of my life and I see this as the only

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2 option. Thank you very much.

3 MR. KLUESNER: Thank you.

4 Additional questions, comments, show of hands? And

5 we will, you know, be here to talk to you I believe

6 but thank you for coming out, appreciate it and

7 we'll see you soon.

8 (The meeting concluded at 9:04

9 p.m.)

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2 STATE OF NEW YORK

3 I, Hannah Allen, do hereby certify that the foregoing
4 was reported by me, in the cause, at the time and place,
5 as stated in the caption hereto, at Page 1 hereof; that
6 the foregoing typewritten transcription consisting of
7 pages 1 through 94, is a true record of all proceedings
8 had at the hearing.

9 IN WITNESS WHEREOF, I have hereunto
10 subscribed my name, this the 30th day of November, 2012.

11 _____
12 Hannah Allen, Reporter

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Public Meeting Transcript

November 15, 2012

Akwesasne, New York

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UNITED STATES OF AMERICA
ENVIRONMENTAL PROTECTION AGENCY

DATE: November 15, 2012
LOCATION: Akwesasne, New York

1 Grasse River Superfund Site - 11-15-2012

2 (The public meeting commenced at
3 7:09 p.m.)

4 MR. KLUESNER: All right. Good
5 evening. Hello. All right. We -- I think we're
6 ready to get started. My name is David Kluesner.
7 I'm with the U.S. Environmental Protection Agency,
8 out of our New York City office. I am covering for
9 your community involvement coordinator, Larisa
10 Romanowski, who had a baby three days ago, a little
11 baby girl. So I'm covering this for her. So she
12 sends her best wishes and would love to be here,
13 but she has a new addition to her family.

14 Again, welcome tonight. Thank
15 you for coming out. I would like to say that this
16 meeting is very important to your community. It's
17 very important to E.P.A. We're here to talk about
18 the proposal to -- to clean up the P.C.B.
19 contamination in Grasse River. So we are in a
20 public comment period that runs through November
21 29th. And what we have done over the last couple
22 of days, we had a public information session and a
23 public meeting in Massena yesterday. We had a
24 public information session earlier today at the
11-15-2012, Akwesasne, NY, Grasse River Superfund Site Public Meeting

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2 Mohawk High School. This meeting tonight is being
3 recorded. There are individuals here that have
4 recording devices, which is completely fine. We're
5 a very open and transparent organization and so
6 that's perfectly fine, but just to be aware. We
7 also have a stenographer tonight. Howard, to the
8 left, your right, will be transcribing the meeting.
9 And the purpose of that is to capture all of your
10 comments. And what we are going to do is to
11 collect comments through the 29th via e-mail, mail
12 to Young Chang, who I will introduce here shortly,
13 comments that you make tonight. We also have
14 comment cards, so that if you don't want to give
15 verbal comments tonight, you can fill out a comment
16 card and leave them in the box. So there's a
17 number of ways that you can comment on the
18 proposal.

19 The remedy has not been selected.
20 It is a proposal. We will go through the process
21 by which we select remedies and then, you know,
22 describe that process to you here shortly. All
23 right. So again, this is a very important meeting.
24 We take your comments seriously. And what we will
11-15-2012, Akwesasne, NY, Grasse River Superfund Site Public Meeting

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2 do after -- after the public comment period is we
3 will respond to all of the comments in what we call
4 a responsiveness summary, which is a part of a
5 document that we call a record of decision. And in
6 that document we will outline the selected remedy
7 and the responses to your comments and questions
8 tonight and what you submit during the comment
9 period. So again, thank you for coming out.

10 I want to just make some introductions of our
11 E.P.A. team. And the true boss here is actually
12 directing me, so let it not be mistaken who is
13 running the show. Young Chang is E.P.A.'s project
14 manager. We have her supervisor, Pete Mannino. We
15 also have Dr. Marian Olsen with E.P.A., who is a
16 human health risk assessor for health related
17 questions. All right. And then we have with EPA,
18 Doug Fischer, who is assistant regional counsel,
19 that's been working for E.P.A. for quite a long
20 time and is very versed in these kinds of issues.
21 We also have New York State's representative here,
22 David Traum (phonetic spelling). And we have
23 scarlett. Thank you.

24 And then there's a number of
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1 Grasse River Superfund Site - 11-15-2012
2 folks from the St. Regis Mohawk Tribe, like Chief
3 Paul Thompson, Chief LaFrance, Chief Hart, and
4 Sub-tribal Chief Eric Thompson. I apologize if
5 I've excluded anyone. This is actually my first
6 time here, but I think that I've tried to capture
7 those folks.

8 The agenda tonight for this --
9 for this meeting, there will be a Thanksgiving
10 address by Sub-Chief Thompson, then Pete Mannino
11 with E.P.A. will describe the Superfund process by
12 which remedies are selected. We'll go over a
13 little bit of site history and background; Young
14 Chang will give that. And then we'll end with --
15 with questions and answers. And so -- yes, ma'am?

16 UNIDENTIFIED SPEAKER: You forgot
17 to mention the Mohawk Council of Akwesasne.
18 They're here, too.

19 MR. KLUESNER: Thank you very
20 much. The Mohawk Council for Akwesasne; thank you.
21 Anyone else that I forgot? And much apologies if I
22 have. All right. Thank you.

23 So what we're going to ask you to
24 do is hold your questions and comments until the
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2 very end unless there is a clarifying kind of
3 question. If you absolutely need to know an answer
4 before you -- to understand what we're saying, if
5 we use an acronym, we apologize, and we can stop
6 right there and clarify. But if it's just
7 commentary, you know, we can wait until the end.
8 You have comment cards by number and just to give a
9 little bit of an orderly process, we'll make sure
10 everybody has a chance to talk tonight. So with
11 that, I would like to turn it over to Sub-Chief
12 Eric Thompson for the Thanksgiving address.

13 SUB-CHIEF THOMPSON: (An address
14 is given in the Native Mohawk language.)

15 (Off-the-record discussion)

16 MR. MANNINO: While we're waiting
17 for the additional chairs, I also wanted to
18 recognize Jacob Terrance with the Environmental
19 Division, so we forgot to mention him earlier.
20 Thank you.

21 (Off-the-record discussion)

22 MR. MANNINO: Okay. I'm going to
23 start by providing some background information
24 regarding the Superfund process. So toxic waste
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2 disposal disasters prompted Congress in 1980 to
3 pass the Comprehensive Environmental Response
4 Compensation and Liability Act. This is commonly
5 known as Superfund. And what that does is it
6 provides federal funds to clean up hazardous waste
7 sites and to respond to emergency situations
8 involving hazardous substances. It also empowers
9 E.P.A. to compel the responsible parties to either
10 pay for or conduct the cleanup or necessary
11 response actions.

12 So let's talk a little bit about
13 the Superfund remedial process. When a site is
14 initially discovered, it undergoes a preliminary
15 assessment and a scoring process to determine
16 whether or not the site is eligible for listing on
17 the National Priorities List. At the conclusion of
18 that process, E.P.A. will propose -- will enter
19 into a public comment period and propose a site for
20 listing on the National Priorities List. There's a
21 public comment period and based on the comments
22 received at that public comment period, E.P.A. will
23 determine whether or not a site should be listed
24 final on the National Priorities List. I should
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2 note that sites that are not on the National
3 Priorities List only enforcement lead actions can
4 be taken, and such is the case with the Grasse
5 River Superfund site.

6 So once the site is proposed for
7 listing on the National Priorities List, E.P.A. can
8 initiate what is called the remedial investigation
9 and feasibility study. The purpose of the remedial
10 investigation is to define the nature and extent of
11 contamination at the site. It is during the
12 remedial investigation that a risk assessment is
13 conducted. The risk assessment determines whether
14 or not there is any unacceptable risk to either
15 human health or the environment. The feasibility
16 study looks at alternatives or technologies to
17 clean up the site.

18 The proposed plan is prepared
19 after the remedial investigation and feasibility
20 study is completed. And that proposed plan
21 summarizes the results of the remedial
22 investigation and feasibility study and it
23 identifies the preferred alternative to clean up
24 the site. E.P.A. solicits public comment on that
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2 proposed plan, as Dave was mentioning earlier. So
3 the meeting that we're having tonight and meeting
4 that we had last night are part of that public
5 participation process and we receive written and
6 verbal comments on the proposed plan. As Dave
7 mentioned, the public comment period for this
8 proposed plan concludes on Thursday, November 29th.

9 After the public comment period
10 ends, E.P.A. reviews all of the written and verbal
11 comments that were received and, as Dave said,
12 develops what is called a responsive summary. And
13 we provide written comments to every comment --
14 written responses, excuse me, to every comment that
15 we receive and that is included in what we call the
16 record of decision. It is the record of decision
17 that identifies the selected remedy to clean up a
18 site.

19 After a record of decision is
20 issued, we enter what's called the remedial design
21 phase and it's in the remedial design phase that
22 all of the drawings, the work plans, the
23 specifications on how the work is actually going to
24 be conducted are developed. So issues regarding

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2 monitoring, health and safety plans, traffic
3 routes, things along those lines are all developed
4 during the remedial design phase.

5 After the remedial design phase,
6 the actual construction begins and that's called
7 the remedial action phase. And during the remedial
8 action phase, long-term monitoring and data is
9 collected to ensure that the remedy is working as
10 it was intended. And it is that data goes into
11 what we call five-year reviews. After a site, the
12 construction begins at a site, every five years we
13 evaluate it to ensure that the remedy is
14 functioning as intended. And it's not until after
15 all of the remedial action objectives of the record
16 of decision and all of the construction activities
17 are conducted that the site could be considered for
18 deletion from the National Priorities List. And
19 when the E.P.A. proposes a site for deletion from
20 the National Priorities List, we also have a public
21 comment period on that proposed deletion and we go
22 through a similar process where we have -- we
23 solicit comments from the public.

24 So that's basically the Superfund
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2 process. So with that, I'll turn it over to Young
3 Chang, the remedial project manager. Thank you.

4 MS. CHANG: Can you hear me all
5 right? Good evening. Thank you for coming out
6 tonight. We are here to talk about the Grasse
7 River Superfund site. I will try to keep my
8 presentation brief so then we could have more time
9 to listen to your comments and answer your
10 questions.

11 The figure one that you see here
12 is showing the location of the Grasse River
13 Superfund site in relation to the other two
14 Superfund sites, Reynolds and the former G.M. site,
15 which are along the St. Lawrence River.

16 The lower Grasse River was
17 excavated in the early 1900s to allow for increased
18 flow for the purposes of power generation from the
19 Power Canal and also from the Powerhouse. That's a
20 picture of the Powerhouse with the Grasse River and
21 it's actually the power canal that's being
22 excavated in the photo below.

23 In 1902, formerly known -- ALCOA,
24 formerly known as the Pittsburgh Reduction Company,
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2 had started constructing an aluminum plant in
3 Massena. ALCOA had continued to get its energy
4 source from the plant -- for the plant from the
5 Powerhouse until 1958 when a much larger
6 hydroelectric dam was constructed in the St.
7 Lawrence River. That project was called the F.D.R.
8 Project, with the Eisenhower Locks System and the
9 Moses-Saunders Power Dam.

10 This same year, NYPA, New York
11 Power Authority, stopped operation of the
12 Powerhouse and the Power Canal, after which the
13 Grasse River started flowing much slower than it
14 did previously. The Grasse River flows
15 approximately one -- zero point one feet per
16 second. In comparison, the St. Lawrence River
17 flows three feet per second. So that gives you
18 some comparison of the flow.

19 It was also in the '50s when
20 ALCOA started using oil containing P.C.B.s.

21 So how did the Grasse River site
22 get contaminated? ALCOA had historically
23 discharged wastewater containing oil and P.C.B.
24 into that outfalls, Unnamed Tributary, and to the
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2 Power Canal. Oil containing P.C.B.s were used from
3 the '50s, as I said earlier, into the mid-'70s.
4 And this explains why the Grasse River site, which
5 has much higher concentration of P.C.B.
6 contamination towards the bottom of the sediment
7 column whereas the top has markedly less P.C.B.
8 concentration. The other reason why we see much
9 less contamination at the top is because ALCOA had
10 conducted an extensive upland remediation under the
11 New York State Department of Environmental
12 Conservation Order of 1985, thereby cutting off the
13 upland source of the contamination into the Grasse
14 River, after the completion of the remediation on
15 the upland in 2001.

16 In 1989, E.P.A. issued an order
17 to ALCOA to investigate the ALCOA study area,
18 develop cleanup alternatives, and then to design
19 and implement the remedy that gets chosen by E.P.A.
20 In '91, ALCOA started the investigation. In '95,
21 E.P.A. amended that order to have ALCOA conduct
22 some removal of approximately three thousand cubic
23 yards of material of sediment, debris, and boulders
24 around the ALCOA outfall 001, which had the highest
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2 concentration of P.C.B. contamination.

3 The initial ALCOA study area was
4 much more expansive than the seven point two mile
5 that we are addressing and going to be talking
6 about tonight. The study area included the
7 upstream section of the Grasse River, the Power
8 Canal, the Robinson Creek, and the Unnamed
9 Tributary. And this section encompasses seven
10 point two miles of the Grasse River.

11 From '91 to 2010, many studies
12 have been conducted to define the extent of the
13 contamination and to develop cleanup alternatives.
14 As shown here, many pilot studies and demonstration
15 projects also have been conducted in the river to
16 evaluate various technologies and to gain site
17 specific information.

18 In '95, as I said earlier, a
19 non-time critical removal action took place near
20 outfall 001, and that's where the approximate three
21 thousand cubic yards of sediment was taken out
22 along with boulders and debris.

23 In 2001, capping pilot study area
24 was conducted in this region where it looked at

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2 various types of capping materials and
3 implementation methods. It was during the
4 monitoring of that capping pilot study when we
5 found that severe ice jam events could occur and it
6 could also scour away that cap and also the
7 sediment underneath that cap. This was discovered
8 in March of 2003. Further investigation was
9 started from then to get a better understanding of
10 the ice jam events and to find solutions to prevent
11 scouring from the ice jam events.

12 In 2005 ALCOA had conducted the
13 remedial options pilot study where some of the main
14 channel was dredged. We also had dredging in the
15 near shore. There was thin layer capping in the
16 near shore as well and armor capping of one-acre
17 area as well in the main channel. In the design --
18 the design also had included an ice control
19 structure to be implemented. However, it never was
20 constructed because of the significant opposition
21 that we received from the community members.

22 In 2006, activated carbon pilot
23 study was implemented in this region. And not
24 shown here, but in 2007 ice breaking demonstration
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2 project took place in the whole seven point two
3 mile of the Grasse River.

4 These are the bullets that I just
5 discussed.

6 So this is a picture of an ice
7 run taken in March of 2003, broken pieces of ice
8 running on top of Grasse River. This is a profile
9 of what an ice jam is. So those broken pieces of
10 ice that was flowing, the ice run, comes upon the
11 lower Grasse River, intact solid piece of ice
12 cover. This accumulates. The accumulation becomes
13 a toe of ice jam. So there's a restriction in the
14 flow. So the flow of the water can go through a
15 much bigger area and then all of a sudden it's
16 restricted to a much smaller area the water needs
17 to flow through, and that creates a much higher
18 force and it is that force that creates turbulence,
19 not the chunks of ice that gouges the sediment.
20 That's not what's happening. It's the reduced area
21 creating a much greater force, scouring away the
22 sediment. And in the case of March of 2003, it
23 scoured away some of the cap along with the
24 sediment underneath and it deposited further

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2 downstream. Note that that cap that was installed
3 in 2001 did not take into consideration scouring
4 from ice jam events. So it was not designed to
5 withhold or address the -- the severe force.

6 This is another Grasse River
7 profile giving some dimensions, average dimensions
8 for the site. The river width is on the average
9 from four hundred to six hundred feet wide. The
10 depth of the water in the main channel is
11 approximately fifteen to twenty feet depth. These
12 areas are called what we refer to the near shore.
13 Near shore is defined as sediment that is
14 underwater with less than five feet of water. And
15 the sediment in the main channel, we typically have
16 five feet or less of sediment. However, some areas
17 there's pockets of eight to ten feet depth of
18 sediment.

19 Contamination in the near shore
20 is predominantly restricted to the upper feet, to a
21 foot and a half. The other key thing to remember
22 and see in this profile is at the bottom, you have
23 bedrock and hardpan which makes it very difficult.
24 And actually, this is a better diagram of the site
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2 situation at Grasse River.

3 So some of the key findings from
4 years of investigation. P.C.B., or polychlorinated
5 biphenyl, which is also known as P.C.B.s, are --
6 are the main concern for the Grasse River site or
7 are the concern in the Grasse River site. Eating
8 contaminated fish from the Grasse River site is the
9 primary human health risk. Ecological risk at the
10 Grasse River site is also unacceptable and driving
11 remediation. Seven point two mile stretch of the
12 site sediment is contaminated with P.C.B.s and it
13 is widespread. Sediment in the Grasse River site
14 is stable, except for the upper two miles where
15 severe ice jam events can occur and potentially
16 scour sediment at depth. The lower five miles,
17 where sediment is stable, it is the sediment at the
18 surface that is the continuing source of P.C.B.s to
19 the biota.

20 As mentioned previously, the
21 highest concentration of P.C.B. contamination in
22 the main channel is found towards the bottom, near
23 the hardpan and the bedrock and that is why over
24 dredging in the main channel is not possible. In
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2 over fifteen years, P.C.B. levels in small mouth
3 bass and brown bullhead have declined over ninety
4 percent, whereas the P.C.B. levels in the spot tail
5 shiner have shown decreases by fifty-five to sixty
6 percent. However, the rate of decline has
7 decreased and the fish are still contaminated. The
8 New York State Department of Health still advises
9 not to eat fish caught from the lower Grasse River.
10 Decline of P.C.B. levels in fish are mostly due to
11 the source control on land, as I spoke of earlier.

12 During the investigation for
13 investigation purpose, the river, the seven point
14 two mile, was segmented by transects where ten
15 transects were equal to one mile. So we have
16 seventy-two transects which are equal to seven
17 point two mile, where predominantly all of that
18 seven point two miles is contaminated. P.C.B.
19 contamination is widespread in the Grasse River
20 site. This figure also shows some of the pilot
21 projects and demonstration projects that I spoke of
22 earlier.

23 So the next two slides shows the
24 ten alternatives that E.P.A. had evaluated. Ten
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2 alternatives, ranging from no action -- no further
3 action, to all capping, to all dredging were
4 considered, with combination of dredging and
5 capping alternatives in between. Amongst the
6 active remediation or active alternatives, the
7 range is from hundred and fourteen million dollars
8 with a three-year construction period to almost one
9 point three billion dollars with eighteen-year
10 construction period.

11 So the ten alternatives were
12 evaluated against following nine criterias. The
13 first two bullets are the threshold criteria,
14 meaning that each alternative must meet these
15 statutory requirements in order to be selected.
16 The next five bullets, starting from the long-term
17 effectiveness and permanence, down to the cost, are
18 the balancing criterias where a detailed technical
19 analysis is conducted and compared. The last two,
20 the State acceptance, Tribal acceptance, and
21 community acceptance, are modifying criteria group,
22 where a formal acceptance are assessed during and
23 after the public comment period, which in this case
24 it ends in November 29th.

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2 E.P.A. and the New York State's
3 preferred remedy is Alternative Six. This is a
4 bigger poster. All the near shore, which is
5 represented in the yellow, that has P.C.B.
6 contamination of equal to one parts per million and
7 greater will be dredged out. After dredging, that
8 area will then be backfilled to grade, not for the
9 purposes of chemical separation, because we are
10 confident that we could get it out completely;
11 however, the backfilling is to bring it back to
12 grade for the purposes of habitat type. So then we
13 could return the habitat for the near shore.

14 In the upper two miles,
15 represented in green here, will be capped and this
16 is in the main channel and it will be capped with
17 an armor cap of approximately twenty-five inches.

18 In the blue is the lower five
19 mile approximately of the main channel which will
20 be capped with the sand and top soil twelve-inch
21 layer. Also the dredged material will be dewatered
22 and disposed of on ALCOA's landfill that exists
23 currently, which would also need to be expanded to
24 accommodate the additional material that's being

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2 dredged, which is approximately a hundred thousand
3 cubic yards or a little bit more.

4 In addition, habitat
5 reconstruction or disturbance happened due to the
6 remediation will occur.

7 And finally long term monitoring
8 and maintenance will also occur and not only to
9 address maintenance and monitoring of the caps to
10 ensure that it is functioning as designed and
11 intended, but also to continue monitoring the fish
12 and the water and the sediment to ensure that our
13 remedial action objectives are met.

14 These are the items that I just
15 spoke of.

16 So I've been receiving many
17 comment letters from people of Akwesasne and
18 Massena and also I've been reading the local
19 newspaper with people's opinions and there seems to
20 be three very common questions and concerns that I
21 have seen. And those are listed here.

22 The first is why not dredge the
23 main channel too. Valid point, if we're proposing
24 to dredge the near shore, why not main channel.

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2 That's because of the site specific conditions that
3 we have at the site. First, we're going to be left
4 with very high residual concentration in the main
5 channel and this is based on what we actually have
6 done at the site and that's because the sediment
7 profile at the site has lesser concentration at the
8 top, as I mentioned, and a very high concentration
9 at the bottom. Compounding that, that high
10 concentration is at the bottom, closer to the
11 hardpan and the bedrock. When you dredge, you're
12 unable to capture all of the contamination to a
13 point where we're satisfied to leave it as is. So
14 whatever alternative you look at, even if you do
15 more dredging at this site in the main channel, you
16 still need to rely on capping ultimately to solve
17 the problem.

18 The photo -- the figure here
19 shows, from the remedial options pilot study, work
20 zone one was dredged out. This is a bathymetric
21 figure. This figure shows the zero to three inch
22 depth of the sediment concentration was, on the
23 average, from this region, four point one parts per
24 million. Well, after the dredging the

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2 concentration was higher at a hundred and fifty
3 parts per million. So even though they did
4 extensive dredging throughout this whole work zone
5 one, because of the level that remained, the
6 residuals, they still needed to cap.

7 Also, you could see from this
8 bathymetric figure, the ridges. We have very
9 uneven and irregular bottom condition at this site.
10 Lastly, you could also see this photo of the type
11 of debris that we took out of the main channel. So
12 this, to give you some comparison in size, this
13 tire is not just your sedan size tire, but it's one
14 of those eighteen wheeler tires. So I don't know
15 the actual dimensions of those, but they're really
16 big. This is not just a rock. These are boulders.
17 So it's quite huge, the debris and boulders that we
18 have in the Grasse River main channel.

19 Another common question that I've
20 been receiving is can armor cap work? Yes, it can.
21 Armor cap has been designed for this site using
22 models to address turbulent flow, velocity, ice
23 thickness, amongst others, to protect against
24 scouring forces that are created under the ice jam

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2 toe. Armored cap was successfully placed in the
3 Grasse River site during the 2005 remedial options
4 pilot study and it is still in the river. As can
5 be seen by these photos, this is in river photo
6 when we placed it in 2005. This is four years
7 later in the same region with armor cap underneath
8 it, but natural sedimentation occurred on top. So
9 it's difficult to see the rocks underneath, but
10 this is in a similar area where there is armor
11 capping beneath. Armor cap has been used at other
12 lakes and rivers at contaminated sediment sites to
13 address erosional forces and scouring forces. So
14 the reason for the erosional forces may be
15 different, so in our case the reason for that
16 erosional force or scouring force is because of the
17 ice jam events that are severe enough to scour away
18 sediment. The reason behind that high force may be
19 different. However, the problem is the increased
20 force. The solution we're recommending is an armor
21 cap and that has been utilized in many, many other
22 contaminated sediment sites.

23 The third common question I've
24 been receiving is why even bother dredging the near
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2 shore if capping is just as good or just as
3 effective? I disagree with that comment. Capping
4 in the near shore for the Grasse River is not as
5 good as dredging and backfilling to grade. There
6 are many benefits to be gained by dredging the near
7 shore and backfilling it to grade. First of all,
8 ALCOA has already demonstrated that it can
9 successfully dredge the near shore in the Grasse
10 River. Unlike the main channel dredging, near
11 shore would not need a cap after dredging. Since
12 the dredging will be successful, capping will not
13 be required for the separation of the
14 contamination. We are backfilling it to grade,
15 like I said earlier, but the purpose of that is
16 different. The purpose is to bring it back to a
17 habitat type.

18 Lastly, dredging the near shore
19 will remove some of the steep side slope which we
20 know are difficult to cap. So what I mean by that
21 is I'll show you here. So this is the near shore
22 that I speak of. On the side, these are the side
23 slope. As you can see by this diagram, it's quite
24 steep. In many of our places in the Grasse River,
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2 it's quite steep. It's going to be a challenge to
3 cap those areas. So when you dredge out this near
4 shore, you'll take away some of that near shore.
5 So that's the other added benefit. Not to mention,
6 if people have property along the Grasse River and
7 they wanted to place a dock in the future, well
8 that would be a lesser of a concern for that
9 property owner because they're going to place a
10 dock with support system within the near shore.

11 Thank you.

12 MR. KLUESNER: AS I mentioned
13 earlier, before the presentation started, this part
14 of the process is very important to E.P.A.; it's
15 very important to your community. I think the
16 public involvement, community input, is a constant
17 process. It's not just tonight or during this
18 comment period. We've tried to listen to community
19 concerns and input along the way. After the remedy
20 is selected, we will continue to involve the
21 community, which is one of the reasons why we ask
22 you to sign in and, you know, put your address down
23 because we want to continue to share information
24 and hear from you. I've been involved in a number
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2 of river -- contaminated river sediment cleanup
3 projects and those that are truly successful are
4 those that involve you throughout the process, not
5 just tonight, not just leading up to the decision,
6 but to work with and involve the communities in
7 every step of the way. This is -- this is your
8 river. All right. So we respect that.

9 with that, I just -- another
10 reminder that the comment period does close on
11 November 29th. A lot of ways to submit comments,
12 so please do so. And with that, you know, just as
13 some more acknowledgements, in terms of, you know,
14 getting to this point, we've worked very closely
15 with the St. Regis Mohawk Tribe, the Environment
16 Division, and I failed to acknowledge Jacob
17 Terrance, a very critical part of this -- of this
18 whole process and has been, you know -- talking
19 with you, it's been a pleasure to work with you.
20 So -- and the New York State D.E.C. and the
21 Department of Health. We also have a federal --
22 what we call federal trustees, the National Oceanic
23 and Atmospheric Administration and U.S. Fish and
24 wildlife Service that advised us on ecological

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2 issues and on natural resource damage assessments
3 and restoration claims. And then the Grasse River
4 Community Advisory panel is a very important part
5 of this process as well. We have a number of
6 contractors that work for E.P.A. and ALCOA and then
7 ALCOA who has representatives here tonight as well.

8 with that, we have a number of
9 folks that are here that I introduced at the
10 outset. They have a lot of knowledge. I hope you,
11 you know, pick their brains and ask them questions.
12 To the extent that we cannot answer questions, we
13 will certainly get those answers to you, either in
14 person or through the responsiveness summary later
15 on. So with that, I would like to start the
16 questions and answers.

17 Young, if you'd -- sit there.
18 I'll join you. Lucky number one -- we have a
19 numbering system. I mean anybody that has a
20 question or comment can go tonight. We just have
21 kind of a numbering system just to make it an
22 orderly process, a fair process.

23 Number one? Pass. Okay. Number two? If you
24 have this card with a two on it? And if you

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2 would -- what we're going to do

3 MS. CHANG: If you could just
4 come to the mic. The mic cord is very short.

5 MR. KLUESNER: It's very short.
6 Could you -- would you mind speaking into the
7 microphone so we can hear?

8 UNIDENTIFIED SPEAKER: No; I just
9 want to know when construction will begin.

10 MR. KLUESNER: The question was
11 when will construction begin.

12 MS. CHANG: Can everybody hear
13 me? I have a loud mouth.

14 UNIDENTIFIED SPEAKER: No.

15 MS. CHANG: Okay. I need a
16 louder mouth.

17 First, the comment period needs
18 to end and then eventually, once the record of
19 decision has been issued, then we can start the
20 design period. The remedial design period we are
21 currently estimating may take approximately two
22 years. And it's going to take that long because we
23 have to do further investigation, make sure we
24 really refine the areas of contamination and know

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2 how we're going to address them. And also we still
3 need to really work out the habitat reconstruction
4 aspect. So all of that will take some time. So
5 we're estimating approximately two years before an
6 actual go out to the field and start working.

7 MR. KLUESNER: Okay. Number
8 three, it is Mr. Hassig.

9 MR. HASSIG: Okay. My name is
10 Donald Hassig and I represent Cancer Action New
11 York. We started Cancer Action New York here in
12 the St. Lawrence River Valley back in January of
13 2000 and we did that because of the high cancer
14 rates that were in this whole -- this whole region.
15 And it's all about chemicals. Cancer is caused by
16 exposure to chemical carcinogens and agent
17 carcinogens. The agent carcinogens are like say,
18 you know, radiation from say nuclear disasters, the
19 E.M.F. and the R.F. Those are agent carcinogens.
20 Chemical carcinogens are the other parts that cause
21 cancer. You know, it's this thing about, you know,
22 just talking about say the bad genetics or the, you
23 know, the bad behaviors. That's not what causes
24 cancer. What causes cancer is the damage to the
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2 D.N.A. The damage to D.N.A. is caused by chemical
3 carcinogens and agent carcinogens. And so the
4 problem is the reason there is high cancer rates
5 here is because there's lots of exposure to
6 chemical carcinogens and agent carcinogens. And
7 the chemical carcinogens figure the most highly,
8 you know, in that -- in that exposure.

9 So we started the group in
10 January of 2000 and we just started doing this
11 trash burning. The trash burning was occurring in
12 a lot of farms and stuff in St. Lawrence County and
13 around Clinton County and around the whole state
14 really. And then we got focusing on dioxins
15 because dioxins are the chemical concerned with
16 trash burning. Dioxins are persistent organic
17 pollutants. The acronym is P.O.Ps. Once we
18 learned how dangerous the dioxins were and how they
19 were part of the food supply, dioxins are -- when I
20 say persistent, that means they don't break down,
21 organic means they are hydrocarbon. It means they
22 dissolve in fat tissue. They're lipids. They're
23 fat soluble. Like the P.C.B.s. P.C.B.s are oil.
24 They dissolve in oil. They're part of oil.

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2 They're also -- that's why they become part of the
3 body, in the animal fat part of the body.

4 So we started dealing with
5 dioxins in about 2000 there and then we started
6 thinking about well it's just not -- it's not just
7 the dioxins. There are other chemicals that are
8 soluble in animal fat. It's the P.C.B.s. The
9 P.C.B.s are another group of these big persistent
10 organic pollutants. And then the P.C.B.s were
11 banned in the '70s, the late '70s, like '79.

12 well the problem is there's
13 another group of chemicals that are lipophilic;
14 they're fat soluble. They're persistent. They're
15 organic. And they are also considered to be part
16 of P.O.P.s. They are the flame retardants. The
17 flame retardants, they're in you know all the
18 materials around, you know, in cars, in the
19 ceiling. The flame retardants, they're called
20 brominated flame retardants. They are P.O.P.s.
21 They are continuously being used, being put in
22 products. They're in draperies. They're in rugs.
23 They're in textiles. There's -- you know, they're
24 very ubiquitous. They're in computers. They're in
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2 plastic. So the whole story here about food supply
3 contamination, it is not just about the fish in the
4 Grasse River. This is what causes cancer. This is
5 why there's lots of cancer, lots of diabetes, lots
6 of heart diseases. These diseases that are caused
7 by exposure to P.O.P.s, according to the World
8 Health Organization, the reason there's all this
9 disease is because this is not just the P.C.B.s.
10 It's the P.C.B.S and the dioxins and the flame
11 retardants in the wild, in the beef, in the pork,
12 in the ice cream, and the milk and the cheese and
13 the yogurt and, you know, all the animal fat. All
14 the animal fat in the world is contaminated with
15 P.C.B.s and flame retardants and dioxins and D.D.T.
16 You know, so there's all these chemicals that are
17 P.O.P.s that are in our bodies.

18 But the problem with here at
19 Akwesasne is that you guys, you know, the people,
20 the men and women that live here in Akwesasne, they
21 got higher exposure to P.C.B.s from being
22 downstream and downwind from ALCOA West and the
23 Reynolds facility and the G.M., so here in this
24 particular place there's much more total body

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2 burden of the POPs, the P.O.P.s, but you also ate
3 the contaminated food from the supermarkets, you
4 know, the bromated flame retardants and the dioxins
5 in that, so your problem is that you just had more
6 total P.O.P.s exposure than the average American.
7 There's been studies done, there's been studies
8 done that show that the people of Akwesasne have
9 higher levels of these chemicals in our bodies.
10 It's because the P.C.B.s, what you got here, plus
11 the exposure to what everybody else in the whole
12 world gets exposed to with this kind of global
13 contamination of the food supply.

14 So the point is this, you know,
15 I'll just cut to the chase on this, the point is
16 this, that you people need to be warned about the
17 presence of the P.O.P.s, you know the P.C.B.s, the
18 dioxins, the flame retardants. You need to be
19 warned about where they're at so you can avoid
20 them. You know, the better you avoid them, the
21 less your risk of getting the diseases to develop
22 because it's ongoing. You have an ongoing exposure
23 to these P.O.P.s because you're consuming the
24 animal fats in the mainstream food supply, the

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2 global food supply. And we have asked the New York
3 State Public Health to warn you. We have asked the
4 Center for Disease Control and Prevention to warn
5 you. We've asked the E.P.A. to warn you. We've
6 asked the F.D.A. to warn you. We've just beaten on
7 those doors of the federal government to try to get
8 somebody to warn you about the presence of P.O.P.s
9 in the mainstream food supply. You know, the New
10 York State Department of Health, they will only
11 tell you that they are in the fish in the Grasse
12 River and the fish in the St. Lawrence River. They
13 never say a word. We've begged them since way back
14 in the '90s to start warning people about the
15 presence of the P.C.B.s and the flame retardants
16 and the dioxins in the mainstream food supply, the
17 food you buy in supermarkets. They tell you not to
18 eat the fish in the river. You got to eat
19 something. You're going to be eating the food from
20 the supermarkets and they should warn you that you
21 should not eat very much animal fat from the
22 supermarkets because it contains enough of the
23 P.C.B.s and flame retardants and dioxins to impose
24 a significant amount of risk of developing type two
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2 diabetes, heart disease, cancer, immune system
3 disease like Crohn's Disease and Lou Gehrig's
4 Disease, causes reproductive failures, causes
5 cognitive impairment, causes you know lots of
6 behavior problems, could be A.D.H.D. All the
7 diseases that exist at a high level in the U.S. and
8 around the world are closely associated with
9 P.O.P.s exposure.

10 The World Health Organization in
11 2010, they published a report titled Persistent
12 Organic Pollutants Impact on Child Health. It's
13 only fifty-eight pages. We asked the New York
14 State Department of Public Health to read the
15 document. They read the document. They wrote back
16 to us. They said this is a -- and in quotation
17 marks, this is a -- this is their own words, New
18 York State Department of Health, they said this is
19 a reasonable report. Well if it's a reasonable
20 report, they should be taking action on the
21 recommendations in that report. Their report in
22 chapter seven says take action, you know everybody
23 join forces. All the people in the health arena,
24 the doctors, the -- you know, the public health
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2 people, the E.P.A., the Food and Drug
3 Administration, all -- all of them take action to
4 minimize exposure that children receive of P.O.P.s.
5 It was published in 2010 and here we are in 2012.
6 No action has been taken by any government in the
7 world, other than the W.H.O. who published that
8 report. No action's been taken to follow up on
9 that. New York State Department of Health hasn't
10 said a word about the public. They keep people
11 fully in the dark.

12 And this is why I do it. I do it
13 for this reason and this reason alone. The
14 corporations control the federal government in the
15 United States of America. The corporations control
16 the federal government of Canada and of the
17 European Union. They control all federal
18 governments of the whole world because the more
19 powerful federal governments are and until people
20 learn what -- you know, why this is and what's
21 going on, we'll continue to get public health
22 messages that are political. Public health
23 messages that are just the message the corporations
24 want the people to know and they believe. They

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2 don't want the government telling us that we were
3 poisoned by the corporations, you know, because the
4 truth of it is the government bought it too. The
5 government did not control the corporations. They
6 did not control them. They let them use chemicals
7 carelessly. They did some stuff that was okay.
8 They tried to clean up a few times, but it was
9 always a little too late -- way too late, way too
10 little. So the problem is we've got a world that's
11 been poisoned.

12 MR. KLUESNER: We've got about
13 thirty-one more to go.

14 MR. HASSIG: Sure -- sure. We've
15 all been poisoned and until the government tells
16 the truth about the food supply contamination, the
17 people are eating every day, they're not doing
18 their job. They're going with the corporation's is
19 what is wrong.

20 MR. KLUESNER: Thank you.

21 Number -- number four? Thank
22 you. Okay.

23 DR. NYAMWERU: I'm going to keep
24 it brief because I'm sure we need to have community
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2 speakers being heard as well as us outsiders. I'm
3 Celia Nyamweru, a professor from St. Lawrence
4 University. I want you to ask a more maybe
5 technical question. I'm assuming that your choice
6 of alternatives was based on projections as to what
7 likely conditions in the Grasse River are going to
8 be in terms of flow and that's in terms of what the
9 climatic events are that would strongly influence
10 the river flow. And I'm a bit concerned that
11 possibly you may not be fully taking into account
12 the high probability of future more extreme events
13 which will certainly affect the behavior of the
14 river and, thus, the behavior of these ice jams
15 and, thus, the strength of the capping that you may
16 put in. We've all seen what Superstorm Sandy did
17 to another part of our state and some of us lived
18 through the ice storm in 1998 and we can by no
19 means discount the very likelihood of future very
20 extreme events which could affect the behavior of
21 the Grasse River.

22 MR. KLUESNER: Thank you.
23 Would you like to respond, Young?

24 MS. CHANG: Sure. So the

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2 current -- the design of the armor cap and the main
3 channel took into consideration the hundred year
4 flood event and also the five hundred year flood
5 events. Also, in the design of the armor cap, it
6 was very conservative in that it took into
7 consideration much higher forces and it did take
8 2003 as more of a hundred year flood event. So the
9 designs do take into consideration conservatism and
10 some uncertainties, but I -- I agree with you.
11 There might be additional, you know, greater forces
12 that may not have been anticipated.

13 However, after the implementation
14 of the remedy, we don't just leave a site. The
15 site continues to be monitored and it's a
16 requirement at any Superfund site where
17 contaminants are left. And basically for this site
18 where there's not dredging in the main channel, the
19 contaminants are remaining underneath the caps.
20 That's the proposal. So we are required to
21 continue monitoring it into perpetuity. So we're
22 monitoring to ensure that the cap is functioning as
23 it is designed. If it's discovered that some cap
24 you -- you know, something had happened, some

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2 maintenance is required, the maintenance will
3 occur. If some catastrophic event happens and it
4 had some impact to the cap, the caps will be
5 maintained. So I hope that addresses your concern.

6 MR. KLUESNER: And number five?

7 MR. ARQUETTE: My name is David
8 Arquette. I am presently the Director of the
9 Haudenosaunee Environmental Task Force, Mohawk
10 Nation at Akwesasne. I'd like to begin my
11 presentation by talking about what our brother,
12 Eric Thompson, so eloquently -- eloquently spoke to
13 us here today to start this meeting off. Whenever
14 people gather, our meetings are started and ended
15 with the thanksgiving address or the words that
16 become before all else. This is how we see and
17 understand the natural world. It has a deliberate
18 structure to it. It starts with the people and
19 moves outward and upward from the earth, to the
20 waters, to the plants, to the trees and medicines
21 and the four legged animals, to the bird life, to
22 the sky world, and concludes with our Creator who
23 made all creations to sustain life here on earth.

24 The thanksgiving address reminds
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2 us, each person that's present, that human beings
3 are a small part of much of a larger natural world.
4 Its structure is meant to address, give our
5 respect, thanks, and greetings to each part of the
6 natural world separately. After each part, the
7 speaker states, we -- we who gather here bring --
8 bring together our minds as one for this purpose
9 and assembled people acknowledge their agreement by
10 saying yes. The thanksgiving address reminds those
11 gathered that they have duties and
12 responsibilities, not to themselves but the entire
13 natural world and the rest of creation. The
14 message is simple, that as each part of the natural
15 continues to fulfill its responsibilities, so we as
16 humans have our own responsibility to fulfill to
17 maintain the world as it should be.

18 The Haudenosaunee and the Six
19 Nations Confederacy is among the ancient continuous
20 operating governments in the world. Long before
21 the Europeans came to Turtle Island, our peoples
22 met in consult to principles of peaceful
23 coexistence uninterrupted for future generations to
24 follow. when the newcomers first came to Turtle
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2 Island, they found a land filled with bountiful
3 gifts of our Creator. A man could walk all day
4 without seeing the sky with its bountiful forest.
5 The birds were so plentiful that they darkened the
6 sky during the day. The rivers were so thick with
7 fish you could not see the bottom. And whenever
8 you could see the bottom, you could see the fish
9 twenty-five feet below the surface swimming on the
10 bottom of the river.

11 Then the Europeans decided to
12 leave our Council to form their own union. This is
13 where we start to see our environment start to
14 change. We saw them go to the total path of
15 destruction of our environment. The forest and the
16 animals that inhabit them start to disappear. The
17 rivers became full of sewage that the fish start to
18 disappear. The land, the great lakes of this major
19 tributaries are laced with toxins like P.C.B.s,
20 P.H.s, and mercury, and -- and POPs like Donald
21 talked about.

22 which brings us to where we are
23 here today. We are also here today not only to
24 speak of the future generations, but we -- we

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2 are -- for we are the voice of all creation. From
3 the tiniest insect, the animals, the fish, the
4 plants, the trees, and the birds and all that are
5 dependent on the waters to survive. The Creator
6 gave us the voice to speak for those who are not
7 able to speak for themselves. Indigenous peoples
8 all over the world follow the same law as the
9 Haudenosaunee and that is the natural law. The --
10 the nature has every right to exist just like the
11 humans. We are -- we are put here -- we are to put
12 their rights first, just like we do in the
13 thanksgiving address. We have to do this if we
14 want to curtail our environmental degradation of
15 communities and also in the process of doing so, we
16 could slow down global warming. Our Mother Earth
17 is tired and she is old. She is feeling that she
18 can no longer support us. We who walk about Mother
19 Earth occupy this land for a short time. It is our
20 duty as human beings to preserve the life that is
21 here for the future generations. In order to do
22 this we must join hands with the likeminded people
23 to create strength and unity as our Creator has
24 intended.

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2 Today we ask E.P.A. to join us in
3 selecting a remedy that would dig up the P.C.B.s
4 that has burdened our environment for so long and
5 permanently treat them so the future generations
6 will not have to deal with them, instead of leaving
7 ninety-five percent of contaminated sediments
8 behind. Thank you for allowing me to speak here
9 today.

10 MR. KLUESNER: Would you like to
11 put the comment -- we can take your comment letter
12 or put it in the box? So we'll make sure we
13 capture your comments. Thank you.

14 Number six, please?

15 MS. COOK: My name is Alicia Cook
16 and I'm -- I'm a resident here. These are my
17 people and although you can look at me on the
18 outside and say I look like any one of you guys, on
19 the inside I feel I'm a little different. I am a
20 Haudenosaunee and I try to live my life as close to
21 I can as our original instructions have given us.
22 And with those original instructions, the Creator
23 gave us all of Mother Earth, all the plants and the
24 animals here for us to forage upon. All of that
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2 was a gift to us. And my sons, my husband, I've
3 got grandchildren now, we live off this land and we
4 eat fish. We eat deer meat. You know, when I go
5 home, you know, I put on a different apron here and
6 I'll be chopping up some meat ready to cook and eat
7 it. Do I know where that deer has drunk that water
8 from? Where that fish has swam? Do I? Would you
9 guys trade spots with me and eat that meat, eat
10 that fish? What if that stuff comes right to our
11 doorstep? And all of a sudden, I'm having
12 grandchildren who are being born with two heads or
13 maybe no limbs. That's what we're talking about
14 here. We're talking about our life, our future.
15 Would you like your grandchildren to be walking
16 around like that? Maybe they won't even breathe.
17 Maybe their Creator will just take them right back.

18 This is serious stuff. And
19 there's no pile of money big enough to equal the
20 dangers of our future children. It's only paper.
21 You guys make it every day. You've got machines
22 that make it every day. This should not be a
23 problem. Send the truckloads of money to get this
24 done. That's all I have to say.

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2 MR. KLUESNER: Number seven?

3 MR. TARBELL: Hi. Corey Tarbell.

4 I just want to say that hopefully I can speak for
5 all Akwesasne residents.

6 UNIDENTIFIED SPEAKER: What's
7 your name?

8 MR. TARBELL: Corey Tarbell. I'm
9 a volunteer fireman for Hogansburg, Akwesasne, and
10 what I want to say is I don't -- hopefully, I'm
11 speaking for all, that I stand behind the St. Regis
12 Mohawk Tribe in whatever they feel is right in this
13 situation because I know that there is no hidden
14 agenda with them and I don't -- I don't know these
15 people and I don't trust you. I know firsthand --
16 I worked for General Motors for twelve years and
17 every day I had a bloody nose. Every -- migraine
18 headaches, I don't know where they're coming from.
19 Since they closed, I haven't been healthier, but
20 I'm probably going to die from that place. I
21 don't -- I don't know. Alls I know is whatever St.
22 Regis Mohawk Tribe decides is what we should go
23 with and I believe everybody from Akwesasne is on
24 board with that.

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2 And I don't know what year it
3 was, 1982, when they announced don't eat the fish.
4 They announced that to a community that eats fish.
5 So maybe ten percent stopped eating fish. I didn't
6 see them studies on the people that ate the fish so
7 I don't know what your P.C.B.s are causing. All I
8 know is what I went through at General Motors and I
9 don't care if it costs a billion dollars to do
10 this. Money is not -- money is not an issue. It's
11 our future. And from my understanding, our last
12 meeting we had even if they did Step Ten or Nine,
13 you're still looking at thirty years to even
14 possibly eat the fish, maybe not even, so if it
15 takes eighteen years to do what you're telling me,
16 another thirty on top of that, maybe -- maybe like
17 my great, great, great-grandkids can eat the fish,
18 maybe not. That's all I got to say. Thanks.

19 MR. KLUESNER: Thank you.

20 Number eight, please?

21 UNIDENTIFIED SPEAKER: I'm not --
22 I'm not going to ask a question. I'm going to make
23 a statement. I grew up on Cornwall Island,
24 Ontario. As a child, we ate fish every day, every
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2 day, every day. We drank it and we ate everything
3 from planting. I got married in 1954 and I moved
4 to St. Regis Road. They used to sell fish there,
5 all along the point. They used to sell it seven
6 days a week in the parks, where they park, right up
7 to where we live on the United States side. That's
8 how much fish they were selling there. We ate fish
9 every day. Again, that was in 1954.

10 Slowly when the Seaway came in,
11 they advised us to -- to stop eating fish. Today,
12 there's nobody in St. Regis that sells fish
13 anymore. That's what I have to say. That's what
14 we have seen here. My husband is a diabetic. He
15 gets dialysis three times a week. We haven't eaten
16 fish from the St. Lawrence in about thirty years,
17 all on account of the contamination that the plants
18 and whatever has caused around here.

19 And oh, I could stand here and
20 talk all night, but that's the main thing I wanted
21 to tell you guys, that I never even knew the rest
22 of the Reserve existed as a child. We plant it and
23 we ate it. We caught fish and we ate it. Today,
24 nobody around here sells fish. They go ninety

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2 miles away to get fish inland, so it won't come
3 from the St. Lawrence. That's my story.

4 MR. KLUESNER: Thank you.
5 Number nine, please?

6 UNIDENTIFIED SPEAKER: No
7 question.

8 MR. KLUESTER: No. Okay. Number
9 ten?

10 MS. RANSOM: I'd like to thank
11 Environment for keeping our heads above water all
12 these years and keeping us informed as well as they
13 can in the fight that they're putting up now. The
14 information they've given us has been always
15 upfront because we know where they live.

16 UNIDENTIFIED SPEAKER: State your
17 name.

18 MS. RANSOM: My name is Elma
19 Ransom. I'm a former chief here. I'd like to make
20 a statement about Grasse River cleanup. I want
21 total cleanup. I'm not letting up on that. All
22 the United States Government view the Grasse River
23 as just another cleanup that must be accomplished
24 as quickly and as efficiently as possible. I

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2 believe that they should know what this area means
3 to Mohawk people. Before the Seaway, the Grasse
4 River was seen as a valuable area for the people of
5 Akwesasne. Its beauty was enjoyed by children and
6 grandmothers alike, while providing sweet grass to
7 our basket makers. As the grandmothers would pick
8 sweet grass, the children would play on the grassy
9 slopes and prepare a picnic for the hardworking
10 grandmothers. Fisherman utilized the river for
11 fishing and provide fish to their community.
12 Medicine people would pick medicines from the area
13 to cure or heal the Mohawk people. The Grasse
14 River area was seen as pantry for the Mohawk people
15 and were grateful for the products it supplied to
16 our people.

17 The early thanksgiving that Chief
18 Thompson said starts right from the heart. We
19 do -- we are very grateful to Mother Earth for what
20 they've provided. Other speakers here earlier have
21 touched on that. We are grateful. And to see that
22 we're only going to fix this waterway a little bit
23 to an agreeable degree hurts the bottom of elders
24 who wish to leave something to the future

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2 generations. We have failed. We will have failed
3 if we don't stand up and say absolutely clean up.
4 Spic and span. When I translate to Indian to say
5 they're cleaning it, but they're only cleaning it
6 to a certain degree, just like cleaning the tables.
7 We only scrub them off and put them back on the
8 table. That's how it will translate if you don't
9 fully clean it.

10 I would jump on everybody to say
11 we go for nothing less than absolute cleanup.
12 Pristine the way it was. Maybe it's unrealistic to
13 the money people, but this is worth a lot for many
14 generations to come. We can't let it go. Don't
15 let it be on us to say we looked the other way when
16 we had a chance to have it clean. You want our
17 opinion? We're giving you our opinion. We want
18 the best. We were totally disregarded when it was
19 time to make these decisions. It's wonderful to
20 have the excuse to say we didn't know P.C.B.s was
21 harmful. Nobody cared about P.C.B.s until it
22 seeped to Racquette Point and nursing mothers
23 discovered that they had P.C.B.s in their system.
24 That was our first inkling that it was there and
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2 where it was coming from.

3 The Thompson family that lived
4 near there have been barking about it for years
5 that they were sick because something was in that
6 dump at General Motors. We didn't know what kind
7 of dump it was, but they buried a lot of stuff. We
8 harped on it forever and ever. Now that the plant
9 is gone, it must be our forefathers that buried
10 those P.C.B. barrels under those buildings because
11 they never did it.

12 I'd like to finish my statement
13 that I will give to whoever is interested in this,
14 as the influence of the non-native people
15 increased, they began to exclude us from the area.
16 At first we believed that those exclusions were
17 only temporary but as time went on, it became more
18 and more apparent that exclusion was forever.

19 Industry and governments partnered to make the
20 Grasse River a toxic dump where even the fish and
21 turtles had a difficult time to live. The once
22 beautiful area now is an industrial zone. The
23 Mohawk people were overjoyed to hear that the area
24 would be cleaned up, just like our grannies would

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2 have liked to and clean up their dishes and not
3 just scrape the excessive dirt from it. They could
4 be used again. These dishes could be used again,
5 just like our river is going to be used again, to
6 eat from. The Grasse River is a family spot, a
7 sacred spot, and the animals, fish, birds, plants
8 that live there are our brothers and sisters.

9 As Chief Thompson said in our
10 prayer earlier, in our thanksgiving, I hope that
11 the current cleanup plan will be as clean as the
12 efforts of the grandmother to clean their homes and
13 house. Let's make the Grasse River spic and span,
14 clean. Remember that. Don't drop the ball.
15 Donald here was helping us explain some of these
16 things. It's not just the P.C.B.s. There's a lot
17 of other chemicals out there. We can't even begin
18 to pronounce them, I'm sure, that is out there. It
19 is our job as elders to aim for the highest quality
20 of remediation for the future of our people. Thank
21 you.

22 MR. KLUESNER: Thank you.

23 Number eleven? Number twelve?

24 MR. DAVID: Good morning. Brian
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2 David, Mohawk Council of Akwesasne. I'm here with
3 my colleagues, Chief Joe Lazore, Chief Bill Sunday,
4 and staff.

5 First of all, we're pleased to
6 have you down. We didn't say that this afternoon.
7 That was an oversight on our part. It's a pleasure
8 to have you. You missed the last time around
9 because of the weather. I submitted a letter. So
10 a lot of what I have to say has already been
11 included in the letter. So I'm just going to
12 summarize and cover areas that weren't covered.

13 We have reviewed E.P.A.'s
14 preferred remedy for the P.C.B. contaminated
15 sediments in the Grasse River. While we support
16 the dredging of a hundred and eight thousand, seven
17 hundred cubic yards of near shore contaminated
18 sediments, it's not enough. We find it
19 unacceptable that E.P.A. will allow the most P.C.B.
20 contaminated part of the river, the main channel,
21 to remain untouched in the river. We find no
22 justification for leaving one point five million
23 cubic yards of heavily P.C.B. contaminated
24 sediments in the river.

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2 The ice caps is an area of
3 concern. We're not entirely satisfied with the
4 proposed performance of those caps. If it breaks,
5 it will be too late. It's true they can repair it
6 later, but by that time it will be way too late.
7 The consequence will be -- will be felt by us down
8 river, downstream. We have concerns about our
9 water intake systems, both with the Tribal on this
10 side and with our people on the other side,
11 contamination of our island areas.

12 Climate has already been covered.

13 We acknowledge the work that
14 ALCOA has done to remediate the P.C.B. contaminated
15 areas and to stop P.C.B.s to the river. However,
16 we are concerned the remediation of the Grasse
17 River is far short of what they have accomplished
18 in remediating their property. If General Motors
19 and Reynolds Metal Company could remove heavily
20 P.C.B. contaminated sediments from the St. Lawrence
21 River, ALCOA can do the same in the Grasse River
22 using the same proven technologies. We believe
23 that Alternative Eight should be the proposed
24 remedy. It requires dredging of approximately

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2 twenty percent of the most heavily contaminated
3 sediments in the main channel plus a hundred and
4 ninety thousand cubic yards in the near shore,
5 which are hot spots and areas most likely to
6 experience ice scour.

7 And finally, the relationship
8 between ALCOA and the Akwesasne community is in
9 strain as a result of a renovation program
10 conducted last summer which excluded the Akwesasne
11 labor force. This action resulted in
12 demonstrations and picket lines being established
13 at the ALCOA plants in Massena. For future
14 renovation and remediation works, we would like to
15 have them classified as native content works as a
16 means to ensure employment and contracting
17 opportunities for -- for our people. And I'm not
18 sure that can be placed in as part of an order or a
19 recommendation from the E.P.A. or if it's just a
20 matter of working with the leadership, but I think
21 it's something that needs to be addressed as either
22 part of this process or part of a parallel process
23 in order to make this process more effective.

24 MS. CHANG: I'm just going to
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2 address very quickly what Brian David had said
3 about the job aspect. We have begun the dialogue
4 with ALCOA to discuss -- there are job training
5 programs within the Superfund process. And we
6 started the dialogue with ALCOA and ALCOA, in
7 return, had come up with a potential idea of, you
8 know, what if we also include in -- in our future
9 proposals to potential contractors certain
10 percentage of jobs potentially reserved for newly
11 trained people of, you know, Akwesasne and Massena.
12 So that has not been finished, but the dialogue has
13 started. So we are looking into future jobs
14 potentially for the people of Akwesasne, job
15 program, training program, to -- to open up future
16 jobs during the remediation as well.

17 MR. KLUESNER: Just to add, sort
18 of amplify what Young said, I was a community
19 development coordinator on the first site in the
20 New York-New Jersey region where we -- where we
21 implemented the Superfund job training initiative.
22 It's on the Passaic River Project and it was very,
23 very successful. We worked closely with the
24 company, that was Occidental Chemical and T.R.

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2 Solutions to work with them to set aside certain
3 jobs, you know, to hire local residents from
4 Newark, New Jersey who had suffered from the burden
5 of pollution for many years. And so we wanted them
6 to give back and so the federal government trained
7 these people and it was such a successful program
8 that the company then spoke to Honeywell and got
9 them interested in hiring people on the Onondaga
10 Lake cleanup project near Syracuse. So it is a
11 very successful program and we want to continue
12 that and we take those comments very seriously.

13 So number twelve?

14 MS. TERRANCE: My name is Mary.
15 I consider myself an avid outdoorswoman. I hike.
16 I hunt. I fish.

17 UNIDENTIFIED SPEAKER: I can't
18 hear you.

19 MS. TERRANCE: I'm sorry. I have
20 a sore throat. My name is Mary Terrance. I
21 consider myself an avid outdoorsman. I hike. I
22 hunt. I fish and I love to paddle. I've paddled
23 every lake and river from Saranac to Old Forge and
24 I think it's really a shame that I have to avoid
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2 what's in my own backyard. I'd just like to share
3 a personal experience. I got to paddle down the
4 Grasse River when I was learning how with an elder.
5 It was a hot summer day and we'd been paddling for
6 about two hours and we decided to just float along
7 and drift and I put my hands in the water like I
8 normally do. And I was immediately told to take my
9 hands out of the water, don't put my hands near my
10 eyes, don't touch my face, and keep my fingers away
11 from my mouth. That was really scary to hear and
12 we still had about eight hours of paddling left to
13 do.

14 well now I'm an elder and I have
15 little cousins who love to hike and camp and learn
16 about fish and plants and they're learning to
17 paddle. I find it really unfortunate that the
18 quality of our environmental cleanup comes down to
19 dollars and cents and takes no cultural components
20 into consideration. I live in Massena now and in
21 Massena everyone is afraid. They think that if we
22 force ALCOA to spend too much money on this
23 cleanup, ALCOA will leave. What they have to
24 realize is that ALCOA is going to do what it wants
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2 to do. They're not going to leave because of this
3 project. They're going to leave because the
4 economy is bad. We can't settle because we're
5 afraid. We need to dredge the main channel. The
6 right thing to do is never the easy thing to do.

7 We're obligated to take into
8 consideration tradition and the next seven
9 generations. Where are my little cousins going to
10 teach their grandchildren to paddle?

11 MR. KLUESNER: Number fourteen?

12 MS. TARBELL: My name is Barbara
13 Tarbell. I'm from here in Akwesasne. As little as
14 thirty to forty years ago, every family in
15 Akwesasne relied on the resources here for
16 sustenance or livelihood, not just the fish but the
17 waterfowl, muskrat, deer, and medicines. So when I
18 say fishing is important to us, I mean all
19 resources, not just the fish. Then along came
20 contamination. Our fishermen, our Akwesasne
21 hunters, our trappers, the people on the front
22 lines were suspicious and knew something was wrong
23 well before any advisories came out. They could
24 see changes happening, the tumors in the fish, the
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2 unusual behavior of the mammals, the changes in the
3 meat and the flesh. I've heard community members
4 tell us of the moment that they heard the fish were
5 contaminated and that contamination confirmed in
6 scientific data, and how they hung up their nets
7 for good. I saw the anger, I saw the hurt, and I
8 felt the pain that this community has endured when
9 our fishermen had the realization that they may be
10 poisoning their own children and their families by
11 providing, when our mothers were scared to
12 breastfeed their own babies. This community has
13 been denied the ability to provide for our families
14 with healthy food.

15 Beyond diet, when I think of the
16 permanent remedy that will restore all Mohawk uses
17 of the Grasse River, it is important to know that
18 it goes deeper than just eating the fish. It is a
19 whole way of life that has been impacted. It is
20 our relationship to the Grasse River. That
21 relationship has been severed. The physical
22 activity of fishing, hunting, trapping, picking
23 sweet grass, and harvesting medicine is knowledge
24 that is precious. There is no price that we can

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2 put on that. And if we cannot do these activities,
3 they will not be passed down to the next
4 generations. It's the techniques. It's the
5 respect. It's the language. It's the specific
6 words that go along with these practices that will
7 be lost. We as people are so strongly tied to the
8 Grasse River and it is our responsibility and
9 obligation to ensure that this relationship is
10 renewed and the river is cleaned up fully.

11 I may never be able to safely eat
12 anything from the Grasse River in my lifetime, but
13 you E.P.A., you have the opportunity to ensure that
14 my children and my grandchildren can. The dredge
15 all option, Number Ten, is my chosen remedy. As a
16 community member, as a daughter, as a mother, and
17 as a future grandmother, leaving P.C.B.s in place
18 does not ensure that my children will not have to
19 deal with this in thirty years. The technical
20 difficulty of dredging is not good enough. It is
21 not good enough to tell that to my children.
22 Successful dredging is occurring across the world.
23 It is not impossible with today's technology.

24 There is one more issue I want to
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2 address today and that's the local economy. The
3 expansion of ALCOA is being dangled in front of the
4 North Country. It has been in local newspapers and
5 local media that the proposed remedy, Alternative
6 Number Six, is supported by many Massena community
7 members because of ALCOA's expansion. The
8 Akwesasne community stands to gain little from this
9 expansion. Akwesasne will also, without a doubt,
10 feel the backlash and the scrutiny from outside
11 townships for opposing this remedy. And we can
12 take it. We have. We would not exist today if we
13 could not. But this area is depressed. It has a
14 depressed economy as it is and this remedy decision
15 is playing right into people's economic hardships.

16 E.P.A., you may say that you have
17 no control over future business decisions of the
18 ALCOA Corporation, but you certainly have the
19 authority now to take the expansion out of the
20 equation. The remedy should be delayed until ALCOA
21 has publicly announced their commitment to this
22 area and that could be as little as eight months.
23 The pending criticism that Akwesasne will face is
24 not E.P.A.'s fault. I don't believe that it's
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2 intentional, but it is well within your authority
3 and your obligation to extend the period in which
4 remedy is decided.

5 MR. KLUESNER: Number fourteen --
6 fifteen? Just as a checking point, we will --
7 everybody will have a chance to speak. So if you
8 did not get a number when you signed in, we'll make
9 sure your voice is heard before you leave. All
10 right?

11 UNIDENTIFIED SPEAKER: I'm one of
12 the -- I'm on the Mohawk Council of Akwesasne. I'd
13 like to tell you a short story. I grew up on the
14 river, on the St. Lawrence. As a child, about six,
15 seven years old, I used to fish with my father.
16 And I remember -- I remember fishing one time and I
17 was able to -- I was able to look down on the -- it
18 was a calm day, so I was able to get on the side of
19 our boat and I looked down and I could see about
20 twenty-five feet -- twenty feet deep and I saw the
21 fish eating off the bottom of the river. And I
22 have to give my age away. I -- I drank from that
23 river at that time. I'm talking about close to
24 seventy years -- seventy years ago. I -- we used
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2 to drink that water right from the St. Lawrence.
3 After the Seaway, or just before the Seaway, we
4 noticed the -- we noticed how dirty the river was
5 getting and people started to complain, but I guess
6 that's what the corporations call it, progress.
7 They -- the river -- and they started even changing
8 the course of the river and we could tell that
9 sediments started to build up on the bottom -- the
10 bottom of the river. And we started to notice that
11 the fish started declining. We also noticed that
12 it was no longer -- we no longer enjoyed fishing.
13 So that was the start of -- the start of this
14 change our way of life.

15 Our fisherman quit fishing. They
16 went to work. They had to leave homes, most of
17 them, and they joined the iron workers industry. I
18 was one of them that joined that iron worker
19 industry. And I used to move away from home,
20 sometimes two weeks at a time, sometimes a month,
21 but that is about around '50s -- the late '50s that
22 our -- our people started leaving homes. They
23 could no longer fish. Most -- some of them, quite
24 a few of them were living out off of fishing.

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2 Anyways, I like to -- I like to
3 recommend that our people, our educated people
4 today, I like to see them take part in the
5 remediation work. I'd like to see our people
6 monitor, along with the E.P.A. people, the progress
7 of the work that they're going to do. I'd like
8 to -- I would rather get reports from our own
9 people of how the work is progressing. And I hope
10 our grandchildren can enjoy our rivers again like
11 we did. Thank you.

12 MR. KLUESNER: Number sixteen?

13 MS. COLE: We heard it was
14 intermission so we come up and sing for you. We're
15 glad to be here because as we were -- we practice
16 every week. We were sitting in our practice and
17 Barb Tarbell called and she's been talking to us
18 about remediation and if we would come and sing.
19 And we agreed that, you know, as everybody has been
20 talking tonight, as Eric opened the meeting, as
21 usual that we do, as Dave Arquette has left now, he
22 talked about you know our obligations to the
23 natural world as -- as we were given those things.
24 The Creator gave us those things to acknowledge and
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2 to take care of. So as we stand here, as the
3 Akwesasne women Singers, we'd like to let EPA know
4 for the record, and we'll give our names, that
5 we're going for Option Ten, that there be complete
6 remediation of the Grasse River, and we don't
7 believe it should be anything less. For the
8 record. My name is (unintelligible) of Bear Clan.
9 I've lived here in Akwesasne all my life. My
10 English name is Maxine Cole.

11 MS. FOX: My name is Katsitsionni
12 Fox. I'm here from Akwesasne and I am in agreement
13 with Maxine.

14 MS. NANTICOKE: Elizabeth
15 Nanticoke, and I'm also in agreement that capping
16 is not the option for us. Complete remediation of
17 Grasse River is.

18 MS. FOX: Theresa Fox. I agree
19 also with Maxine.

20 MS. SQUARE: Jean Square and I
21 just say cleanup, not a cover up.

22 MS. COLE: We're going to share
23 two water songs with you. And they're in our
24 language so I'm going to -- what we're singing the
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2 song is the water is very precious and the -- all

3 the waters across the world are very precious.

4 It's the first song we're going to sing and that we

5 love the waters.

6 (A song was sung.)

7 MS. COLE: The next song is a

8 song that I was asked to write a long time ago when

9 the environment was working on a video while

10 interviewing many of our elders. And the elder

11 that was up before us, what he said is in the song.

12 He looked over and while we're singing the song is

13 my grandfather said a long time ago the waters was

14 good. He was able to look into the waters and see

15 the fish swimming. And like he said, it was way

16 down at the bottom and you could see all the way.

17 It was -- they said that they even tried to spirit

18 and the spirit wouldn't even touch them. It was

19 still swimming. So clear, the waters.

20 And in the beginning of this song

21 it says my grandmother said the water was nice a

22 long time ago because she was able to -- when she

23 was thirsty, she was able to just get water out of

24 the river and drink it to quench her thirst.

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2 (A song was sung.)

3 MR. KLUESNER: Thank you. Number
4 seventeen?

5 MS. THOMPSON: My name is
6 Kakwerais and in English I'm known by Dana Leigh
7 Thompson. But my true name is Kakwerais and I'm of
8 the Bear Clan. I'm a mother, I'm a sister, and I'm
9 a cousin, and I'm a grandmother to thirteen
10 grandchildren. And the first thing I'd like to
11 know here is who Dr. Marian Olsen is? And you're
12 an epidemiologist, Doctor, for the E.P.A., region
13 two?

14 DR. OLSEN: I'm a human health
15 risk assessment with the E.P.A.

16 MS. THOMPSON: And how long have
17 you had that job?

18 DR. OLSEN: Twenty-eight years.

19 MS. THOMPSON: Okay. And the
20 next thing I'd like to know is who the ALCOA people
21 are, if they could put their hands up. Well first
22 of all, what I want to say is that, number one, is
23 that I have absolutely no faith in the E.P.A. None
24 whatsoever. You failed the people at Akwesasne.

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2 And how you did that was you allowed the
3 corporations, like Reynolds, that's now -- belongs
4 to ALCOA, General Motors, and the present day ALCOA
5 West, you allowed them to pollute and destroy our
6 water, our land, the minds of our children, the
7 bodies of our women, and our men, and the future.
8 That's what you've done.

9 The Environmental Protection
10 Agency has stood by corporations more than they
11 have stood by the people that they purport to
12 represent. One study after another, the people,
13 the E.P.A. at Reynolds, what'd you do? You
14 don't -- you make it sound like you did a wonderful
15 job, the E.P.A. You know what you did? If people
16 get in their car and they go to ALCOA, you have
17 dumps all over behind those trees. That poison
18 mitigates. We live downriver from all those
19 plants. And you come here and you have nice
20 pictures and you give nice statements and even this
21 lady here, I think your name is --

22 MS. CHANG: Young Chang.

23 MS. THOMPSON: -- Young Chang is
24 saying -- telling -- giving signals to -- when

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2 Mr. -- when Donald was talking. You have no right
3 to do that. You're in our home. You have no right
4 to say how long somebody can talk. Everybody has
5 the right to speak.

6 A long time ago on Cornwall
7 Island, where Hilda Smoke said she grew up, all the
8 cows start getting sick. And the people knew.
9 They knew it came from across the river at
10 Reynolds. Their cows start dying. They got
11 fluorosis. What did Reynolds do? Did Reynolds do
12 anything to help the people and the ones that are
13 affected today? No. They didn't. So our people
14 live with that legacy. The health facility of
15 these communities is inundated -- inundated with
16 all kinds of disease patterns that some of them
17 have never heard of before. And it's called a
18 magnification process.

19 And the reason why I asked about
20 Dr. Marian Olsen is because if you read all the
21 fancy literature on their site, it says that they
22 have people that come here. They do a risk
23 assessment. They do all these things. Well I
24 never seen Marian Olsen in Akwesasne and I don't

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2 know if any of yous ever seen her show up and ask
3 your health and make an assessment here. Those
4 things never happened. And unless you dig right in
5 and try to understand this, they can sell you a
6 nice story.

7 And ALCOA, this is for use at the
8 table, the business wire posted that ALCOA
9 anticipated they were going to make five point five
10 six billion, but they were so happy, they got an
11 unexpected gain. They made five point eight
12 billion. And they have one point four billion cash
13 on hand. So to try to say and -- say that oh,
14 well, we're not going to -- we're not going to make
15 our facility better if you don't agree with us,
16 that's like a spoiled child. Your company did it.
17 we're not against companies. We want to see people
18 work. But we don't want to see that at the expense
19 of our people because that's what has happened.
20 General Motors, ALCOA, and the former Reynolds
21 plant, they poisoned and polluted everything here.

22 where do we get our water? The
23 intakes for the community are on the St. Lawrence
24 River. And those just happened not long ago. So
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2 when you come here -- especially the E.P.A., when
3 you come here and you're saying all these things,
4 it's really not so. You're saying our preferred --
5 preferred, in your system you call it environmental
6 justice. You've even created a whole language
7 behind that. And what does that mean? That means
8 environmental justice is that you polluted minority
9 people. But you know what I call it? It's called
10 environmental genocide. That's what you're doing
11 to our people. Our people, there's a lot of our
12 people, they're running to -- they're all running
13 to fertility clinics because they want to have a
14 baby and they don't know what's wrong. And then
15 they're fretting over, as some of them spoke, when
16 this first studies happened about the P.C.B.s. The
17 United States government didn't ban it because it
18 was the best thing on earth. They banned it
19 because it was bad. That's why they banned it.
20 Because it has a long lasting life. And so at the
21 time when they did those studies for the breast
22 milk, they said well, to the woman, well maybe for
23 the bonding part, a lot of women said I'm going to
24 breast feed. And one of the top doctors in this
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2 field, Dr. Carpenter, said, now that that maybe was
3 not the right decision to do.

4 So what the E.P.A. should do, if
5 they don't want to be part of the genocide process
6 of our people, our people have all kinds of cancer.
7 We have children, no matter if -- if ALCOA gave us
8 twenty billion dollars, we can never fix them.

9 They will never be right. Their mind is wrong.

10 And you people come parading here and you bring
11 fancy maps and you bring papers and you think
12 you're going to tell us. No. We're going to tell
13 you. If you don't start cleaning up -- oh, we have
14 this rod. We want this preferred treatment.

15 You're agreeing already. You never even came here.

16 You never even sent that woman, Dr. Marian Olsen.

17 She never showed up here. Did she do a risk
18 assessment not only of the ALCOA plant, because
19 she's two plants behind, for General Motors and
20 Reynolds. She never did that.

21 Where's the New York Public
22 Health people? Did they come here? No. And the
23 St. Regis Mohawk Tribe, they have a health clinic.
24 You want to know how much money they get from the
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2 federal government for help? Less than a federal
3 prisoner. So all these added costs for health of
4 our people, is that our responsibility? Is that
5 our responsibility? No, it's not. You know whose
6 responsibility it is? It's the people that did the
7 damage. Those are the ones to be responsible.

8 And maybe what the E.P.A. should
9 do is they should hook up with Schumer, Senator
10 Schumer, because according to the P.B.S., he's one
11 of the biggest senators of the United States
12 Government that can make money. He can get a lot
13 of money. You want to know why? He can raise a
14 lot of money because he goes to corporations like
15 ALCOA. And maybe you should get him on your team
16 so he can raise money to clean up what they've
17 done. Our people, we cannot go anywhere else to go
18 and get our people. We can't. I can't go to
19 Holland. I can't go to Holland and I can't go to
20 France. So if you people don't clean it up, that's
21 why it's called genocide because it's affecting
22 seven generations ahead and of our ability of our
23 people to bear children that are correct.

24 So just remember, if you ever

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2 come back here, because we had a lot of these
3 meetings listening to all your stories. Now it
4 even gets more interesting because you talk about
5 oh, you want to put a cap on the river, certain
6 parts. Now you want to put armor on it. You're
7 getting a little bit better because at General
8 Motors you put plastic. You people have to do the
9 responsible thing. And ALCOA in Massena, we're not
10 against jobs. We're not against jobs. We're one
11 of the most industrial people in this country. Our
12 husbands, fathers, and grandfathers would travel
13 eight hundred miles every week to go and work all
14 across this country. So we like jobs. But we
15 wouldn't want to have jobs that are going to
16 forsake the future of our children. And that's the
17 concept that you don't understand. You think that
18 making all this stuff and making all this poison is
19 all right? Well maybe if you tried living in it.
20 Obviously, do any of you live in Akwesasne? I
21 don't think so.

22 You only look seven -- you only
23 look -- look seven seconds ahead for the market
24 wire, the business wire, how much money you're

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2 going to make. Well our people are priceless. And
3 they've been bombarded and it's about time that you
4 people that say you're the Environmental Protection
5 Agency do what's right. But I'm not asking you to
6 do what's right. Because if you have it in your
7 heart, how you were raised, what your parents
8 taught you, you're going to do what's right. But
9 right now, you're batting zero. Because you
10 haven't done what's right for the people here. Our
11 bodies are filled with P.C.B.s. Where did that
12 come from? Twelve fifty-four, twelve forty-eight,
13 twelve thirty-two, where did those P.C.B.s come
14 from? And there's only two known ways to extract
15 them from your body. One is the breastfeeding of
16 your child and the other one is through semen. Is
17 that a legacy, what some people talked about?
18 That's not what we want.

19 You have to understand that if
20 you don't correct, not just the ALCOA site,
21 Reynolds, General Motors, and do what's right. If
22 not, it's environmental genocide. You talk
23 about -- you talk about Hitler. He did genocidal
24 practices. That's what these companies have done

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2 to our people. Genocide. And as a grandmother,
3 and I'm sure a lot of women in here, when you have
4 a baby, it's a happy event. You're so happy you're
5 going to have a baby or your kids are going to have
6 a baby. Everybody's happy. They can't wait for
7 that baby to be born. But you know what? You
8 people ruined that. Because now when a baby is
9 coming, everybody is worried if that baby is going
10 to be all right. And it's not nice to be there
11 when a baby is born and you look at them and
12 they're not right and no amount of money is going
13 to ever change them. And you people are
14 responsible. That's genocide. So do what's right
15 for once.

16 You've been here not too long and
17 look what you've done to the Earth and now you even
18 make a group that says you're -- they're
19 protecting. I don't think so. And if you don't
20 want to clean it up, we got a lot of people at
21 Akwesasne that will start cleaning it up. And when
22 we talk about cleaning up, we don't mean taking it
23 from the river and piling it on the land. No,
24 that's not what we mean when we say a cleanup. A
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2 cleanup is to make sure that that poison never
3 harms another human being or plant life form. And
4 that means the companies being responsible to put
5 it in a secured area where it's never going to harm
6 anybody ever again. Not in an unlined pit. So
7 that's what I'm telling you. If you don't want to
8 clean it up, and you don't want to clean it up
9 right, we got a lot of people that are going to
10 start cleaning it up for you because we care about
11 our future. And obviously, if you don't do what's
12 right, you're part of the practice of genocide
13 against our people.

14 MR. KLUESNER: Thank you.

15 Number eighteen?

16 MR. THOMPSON: Good evening. My
17 name is Kannitakeron. I'll ask first, because I'm
18 not here to make a comment. I'm here to serve you
19 legally. So I'll ask you, with the glasses on,
20 you're the attorney? Come stand beside me and
21 accept the legal presentation and the command from
22 the first law of the land, which is the Clan Mother
23 Bear Clan. This is our tribal customs and -- when
24 you hold onto that, it is legal. So from our

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2 nation to your nation that you represent, all these
3 people here, ALCOA, you go back to your superiors
4 and you tell them this message I will give you.
5 The message is, from our tribe, the Onkwehonwe
6 Signatory Tribe, which I represent. I am the head
7 man. The difference is there are different
8 denominations of this community, but we all have
9 one common denominator, our health which has been
10 affected by the three mentioned here, ALCOA,
11 Reynolds, and Chevrolet.

12 Our rivers. There's only one
13 statement I have to say before I forget that I
14 agree with. You mentioned your rivers. You forgot
15 to mention our land. And the reason why I say it's
16 our land is because our regional Indian title has
17 never been extinguished. It's still intact,
18 provided you're not under alienation, you're not
19 under guardianship, you're not under severality,
20 you're not under a ward of the state, and you're
21 not under prisoner of war status. All of that
22 which are not. Those terms you might be familiar
23 with, only because you're a lawyer.

24 And when it comes to an Indian,
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2 an Indian is held under by the thumb of the United
3 States or New York State, by those terms I brought
4 to your attention now. That, I'm not under. I'm
5 free. I'm solvent. And it's this command that I
6 will give you now from the first law of the land.
7 Yous are ruled by corpus juris secundum, the second
8 law of the land. The law I speak of is ancient.
9 It's well over thirty-five hundred years. Five
10 hundred years in your constitution in this part of
11 the world.

12 This command will read as such.
13 I have to say one thing. I'm not here to ruffle
14 feathers in regards to treatment -- or agreements
15 that were made in the past. But those agreements
16 will not bind me. And some of the agreements that
17 were made were with some of the Indian people. But
18 it's not legal because they are part of the
19 corporation, which I am not. I am not expatriated.
20 I am sovereign. And that's what you need to take
21 back to your leaders.

22 It's of the Onkwehonwe territory
23 of the Signatory Tribe, to Environmental Protection
24 Agency, Ariel Rios Building, 1200 Pennsylvania
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2 Avenue, Washington, D.C., attention Lisa Jackson.
3 In the process of exercising my Onkwehonwe
4 Signatory Tribal jurisdiction, we command. We
5 don't ask. We don't suggest. We command, only
6 because Indian title, legal title, has not been
7 surrendered yet, legally. So we are in a position
8 to command. We command you and your appropriate
9 bureaucracy to immediately address the matter of
10 Aluminum -- of the Aluminum Company of America,
11 ALCOA, industrial poison to earth, people, and
12 animals, regarding the Grasse River P.C.B.
13 contamination. We are referring to the Aluminum
14 Company of America, ALCOA, Massena plant, situated
15 on land within the Territory of the Onkwehonwe
16 Signatory tribe in what is known to you as Massena,
17 New York. Whatever the agreements of the past were
18 between the federal, state, and autonomy Indian
19 governments, you are hereby given legal notice that
20 our tribal law supersedes all said agreements.
21 Your government is commanded by the authority of
22 the Bear Clan Mother, to remove all contaminated
23 land above, below the ground that constitute a
24 threat to -- a threat to the health of our people,
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2 animals, plant life, and waters. Many of our
3 peoples have been seriously affected due to the
4 contaminants in the water, in the air, and the
5 earth itself. So there is no need to issue monies
6 to do studies that result in meaningless talks.
7 Your proposed -- your proposed plan is
8 unacceptable. Therefore, your government is hereby
9 commanded to begin a total cleanup immediately.
10 You are reminded that we are the signatory tribe of
11 the ancient Onkwehonwe Signatory tribe -- I'm
12 sorry -- Signatory Tribe of the Ancient Onkwehonwe
13 Confederacy, ruled by the first law of the land and
14 not an autonomy native government or corporate
15 charter under your state or federal jurisdiction.
16 You are ruled by corpus juris secundum, second law
17 to the land. Respected in law, Kannitakeron, Larry
18 Thompson, Bear Clan, Headman.

19 This is C.C.'d to Judith E. -- or
20 Judith A. Enck, U.S. Environmental Protection
21 Agency, New York State Department Environmental
22 Conservation, New York State Governor Andrew Cuomo,
23 New York State Senator Charles Schumer, Aluminum
24 Company of America, President Obama. A carbon copy
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2 was sent out to those people.

3 As I indicated earlier, Indian
4 title has not been legally extinguished. It's
5 still alive, still well, providing you have the
6 right character. The Onkwehonwe Signatory Tribe
7 has that right character. They're not dependent on
8 the federal government, nor New York State. They
9 are sovereign. That sovereignty that was before
10 Columbus ever set foot here. You have ten days to
11 respond to that. Within that ten days if you
12 don't, then we'll take it that you agree with
13 everything that is said in there.

14 MR. FISCHER: We will certainly
15 bring this back to the -- let our superiors know.

16 MR. THOMPSON: Thank you.

17 MR. KLUESNER: Thank you.

18 Number nineteen?

19 UNIDENTIFIED SPEAKER: I warned
20 you, Young, and I said that when you come to our
21 community that you're not going to be welcomed with
22 open arms and they're going to hear a lot of
23 different stories. I'd like to -- to go on one
24 that Ms. Ransom said earlier about the P.C.B.s

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2 seeping into Raquette. She mentioned the
3 Thompsons. Well, my family came from there. And I
4 had a lot of crazy jobs growing up here and one of
5 them was picking the nuggets over at that dump at
6 G.M. And we used to swim in the cove because
7 nobody told us we shouldn't. And now I have three
8 sisters that took them a long time to have
9 children. They probably had twenty miscarriages
10 between all of them. You could take all their
11 teeth out of their mouth and still not have enough
12 to make a set of dentures. And when my gums start
13 to bleed, which they probably will, and I don't
14 have an answer for that, because you can ask Larry
15 and you can ask Paul, that -- that we played in
16 those areas. You know we remember the big tube
17 that was in the ground near the Raquette River near
18 the Whistle Bridge, we played in there. Nobody
19 ever told us not to. And now if you go down to the
20 original families that were down Raquette,
21 there's -- every one of them has somebody who has
22 cancer in their family. Every one of us have
23 diabetes. Every one of us has somebody in our
24 family that has thyroid problems. We have a lot of
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2 problems here and it -- and it -- and it comes from
3 the events with the civilization.

4 They promised us all kinds of
5 economic development and they said you guys are
6 going to have jobs forever. Well once we put up
7 all this steel and once we put up all the doors and
8 windows and the stairways, guess what? They laid
9 us off. You can count on one hand in the early
10 days how many Indian people worked in the plants.
11 And you know what? Not one of them people are
12 alive today. My grandfather worked in the plants.
13 He died from colon cancer. I'm not saying that he
14 got colon cancer from the plant because probably
15 can't determine if that was really what killed him.

16 You're explaining the armor cap.
17 what they didn't tell you is that it goes from T
18 one to T twenty-one, which is two point one miles.
19 For the rest of the five miles, they're going to do
20 a twelve-inch layer of sand and whatever else
21 they're going to put down there. Now we know that
22 when the ice scours the river bottom, and Henry can
23 tell you a lot better than I could, that it has a
24 mind of its own. It doesn't -- it's not just going
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2 to touch the sand and say oh, this is where we're
3 going to go. We got to stop here. It has a mind
4 and a spirit of its own. And what that -- the ice
5 was intended to do before there was all this
6 contamination was to do exactly that, was to scour
7 that bottom and now it's killing us.

8 I told you that this is not going
9 to be acceptable to us. We were very disappointed
10 in our last meeting, to the point where, you know,
11 even that is not good enough. I have children at
12 home and they probably doesn't know what that
13 means. But if I told them what it meant, their
14 first reaction would be, well, that's not good
15 enough. And we also know everyone in here, that we
16 will never be able to eat the fish safely. And
17 look at us now. Look at us. We're all fat. Most
18 of us are beautiful. You can't take that away from
19 us. But we have all kinds of problems. I went to
20 a diabetes extravaganza the other day and that is a
21 scary ugly disease, when you lose feet and fingers
22 and you have open sores and wounds. That's scary.
23 I got friends that I grew up with that have all
24 kinds of problems. I grew up with that young woman
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2 right there and I'm afraid what's going to happen
3 to her children because it's probably going to
4 happen to mine.

5 And -- and Dana Leigh was right.
6 There's no amount of money that you can give us.
7 There's no amount of jobs that you can give us that
8 will -- that can replace what happened to us. I'm
9 not standing here and asking you, you know, to do
10 the good thing. I'm asking you to do the right
11 thing and that is to take that river and return it
12 to the way it was. My aunt, who is sitting back
13 there, can remember the time when they ate the
14 fish. My grandma remembers the time when they used
15 to cut the ice out and that was their freezer.
16 That they used to go to different parts. Remember
17 that? You get the drinking water out of the St.
18 Regis -- or the St. Lawrence River, you go to the
19 St. Regis to get the water to do your clothes. I
20 remember my grandmother kept a rain barrel and she
21 drank that. I remember as a little boy she used to
22 make us ice cream out of the snow in the winter
23 time because that's when we didn't know any better.

24 These are not stories that are
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2 myths or that are legends. These are real. Larry
3 has a good point. Dana Leigh has a good point.
4 Everyone that came up here has a point and that is
5 we are not satisfied with this. How can you be
6 satisfied with a solution that is attached to a
7 dollar figure? And ALCOA, you know, I hope you
8 don't leave this region. But you're going to do
9 what you have to do, just like we have to do what
10 we have to do to make sure our people are safe.
11 Dana Leigh said about the health clinic, well we
12 don't get enough money for that and we supplement
13 the health clinic and you know what, nobody gives
14 us that money. We don't get reimbursed for that.
15 We have children that are younger and younger that
16 have got type two diabetes, juvenile diabetes.
17 Morbidly obese. You know why? It's not because
18 that they like to eat. It's because of the food
19 that we have to eat.

20 UNIDENTIFIED SPEAKER: And
21 because they not eat the fish anymore. That's
22 why --.

23 UNIDENTIFIED SPEAKER: Well
24 that's what I'm -- that's what my point is.

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2 They've taken -- you guys have taken away
3 everything that we knew and replaced it with flour,
4 with macaroni, with Ragu. I mean you can ask more
5 people, some of our young people in here, they
6 don't even know how to can anymore because it's so
7 much easier to go to Hannaford or Price Chopper or
8 wherever you go to get your groceries. And that's
9 what happened to our people. You ask a lot of
10 young kids, they don't even like corn soup. You
11 know why? Because it's not salty. You can't get
12 it out of a can. And that's what happened to us.

13 You know, Donald had some pretty
14 good points. I don't understand half of them, but
15 you know, he's got a point. We're not here to --
16 to, you know, say that if you don't do this -- well
17 some of us are. I know Larry is. But we shouldn't
18 have to do that. We shouldn't have to be
19 criminalized in our own land for sticking up for
20 something that we believe in. We have a beautiful
21 park here and it's not enough. We have places for
22 our children to play, but it's not enough. You
23 know why? Because they don't know how to play
24 anymore. And that's probably our fault. But they
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2 know how to read. They know how to play video
3 games. I bet you half of them don't know how to
4 weed a garden. You know why? Because we don't
5 have gardens no more. That's a result of what
6 happened to us. I mean those guys sitting right
7 there, they spend half their lives hanging steel.
8 Do you have time to plant a garden, Roger?

9 MR. JOCK: I take time.

10 UNIDENTIFIED SPEAKER: No, when
11 you're iron working? That -- that you took care
12 of?

13 MR. JOCK: I made time.

14 UNIDENTIFIED SPEAKER: Okay.
15 You're lucky because my father couldn't, you know.
16 And in closing, I'd like to say that if that armor
17 cap is the solution, then it should be the full
18 seven point two miles. If you're not going to
19 dredge it, then you need to armor cap it. Because
20 once it gets to the mouth of the St. Lawrence
21 River, that's where the problem starts. And the
22 problem ends with us. And that's not acceptable to
23 us. Thank you.

24 MR. KLUESNER: Thank you.

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2 Number twenty?

3 UNIDENTIFIED SPEAKER: I just
4 want to say that everything that the women say, we
5 have to back it up. This is one of the faces that
6 you will see as one of your worst nightmares.
7 That's all I have to say.

8 MR. KLUESNER: Number twenty-one?

9 UNIDENTIFIED SPEAKER: A little
10 child knows not to pour oil in water. When a
11 little child pours oil in water, it get cleaned up
12 immediately, not fifty years later, sixty years
13 later. This substance was banned before I was even
14 born and now my third child is about to be born. I
15 have to teach them to fish and to hunt. I'm an
16 organic farmer. We try to do community farming
17 projects because our people forgot how to farm.
18 And one of the reasons they forgot how to farm was
19 because this stuff has gotten into our community in
20 pockets. And you can find it when you do soil
21 testing. And it hasn't been cleaned up.

22 Now there's a bunch of issues
23 going on. We have three plants who picked a really
24 great place -- somehow these plants always end up
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2 next to Indian communities. But back then our
3 people were weak and now we're strong. Our people
4 have learned to fight. And so this here is also
5 our land. The Grasse River is one of our rivers.
6 It's one of the reasons Akwesasne is here. And
7 these people, not these particular individuals
8 here, didn't pour buckets of water in this land.
9 But other people like them made this happen. And I
10 know that if I go and take a dump in my neighbor's
11 yard, I have to clean it up. And if I don't clean
12 it up, well I go to jail. It's funny how at an
13 individual level, it works that way, but when it's
14 a corporate person, it doesn't work that way.

15 I want it put back the way it
16 was, even if it makes the company go bankrupt. Let
17 that be a lesson to other manufacturers, their
18 competitors maybe, to do things in a way that won't
19 cause oil to go into water. We practice organic
20 farming and we know that we can make a nice little
21 pretty picture like this. Look, sediment, sand,
22 gravel, rocks. Nothing will go through that. But
23 we know there's micro-organisms that will go right
24 through that, like it's not even there. And that's
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2 a cornerstone of all of our environmental systems.

3 Little tiny things, you can't even see them. And

4 something eats those and something eats those. And

5 we know P.C.B.s bio-accumulate, so eventually we

6 get it. Either we get it through the fish we eat

7 or through something that eats them or a raccoon

8 eats a shrew and dies in the middle of the woods

9 and a little bit of that stuff is in the middle of

10 the woods.

11 So I don't know how hard it is to

12 dig that all out of there, but if it costs a

13 billion dollars, so be it. Maybe the next guy will

14 be more careful. That's all I got to say.

15 MR. KLUESNER: Thank you.

16 Number twenty-two?

17 MS. THOMPSON: I'm not going to

18 read my letter. I'm just going to pick some things

19 out because it's quarter to ten and there's

20 probably other people that have something more

21 important to say. I've been involved in this whole

22 contamination issue since our community discovered

23 that we had contamination. I was part of MASH,

24 Mohawks Agree on Safe Health, and that was when

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2 there was a lot of panic on Raquette Point and
3 there were a lot of meetings held and that was when
4 we began to form an environmental department in our
5 community. The panic, I don't think you can
6 understand what that was like. People were afraid.
7 They were afraid to plant. They were afraid to
8 drink the water. They were afraid to go on the
9 water line that was supplied to Raquette Point
10 because of the contamination. And people moved
11 away from the river. And it's the strangest thing
12 today when you take a boat and go down the river.
13 You don't see people swimming. You don't -- you
14 don't see people enjoying the water.

15 I live on Cornwall Island and I
16 live on the water, so I see a lot. But back then
17 we all knew that our community was going up against
18 the wealthiest and the most powerful industries in
19 the land. G.M., at one time, was number one on the
20 list. ALCOA is very wealthy. We knew that. We
21 also knew that we probably wouldn't win because
22 little guys finish last.

23 Later on, we organized and called
24 ourselves the Akwesasne Task Force on the

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2 Environment and we had representatives from the
3 three councils in our community and community
4 members that wanted to participate in trying to get
5 things cleaned up. Through this, a lot of studies
6 began. They were sponsored by New York State
7 Department of Health. There were federal grants.
8 And the evidence began to unfold on the
9 contaminants, their source, and the impact on the
10 animals, plants, and our human health. New York
11 State D.E.C. and U.S. E.P.A. became involved as
12 part of their fiduciary responsibility to the
13 Indians. The members of A.T.F.E. knew that we were
14 in for the fight of our lives and many of us would
15 grow old and possibly die before we saw any results
16 of our work.

17 The evidence is there. The
18 cleanup methods are there. And we're still arguing
19 about how much to clean up and how to do it. The
20 wealthiest and the most powerful industries
21 continue to fight the environmental cleanup efforts
22 that the people in Akwesasne want. We've seen over
23 the years New York State and U.S. E.P.A. fold under
24 the political pressure from these entities. You
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2 don't live here. We do. The people from Massena
3 don't live here. They don't experience the level
4 of contamination that we do.

5 Our ancestors were trusting of
6 the promises that were made by the State and
7 Federal governments to protect and promote our
8 ability to live in peace and harmony with each
9 other. As the U.S.A. rushed to secure lands in
10 North America, we were pushed, starved, massacred,
11 and relocated to the point of near extermination.
12 What evolved in the land grab was a commitment of
13 the U.S. government to maintain a fiduciary
14 responsibility for all Indians. And as quote from
15 Dr. Priscilla Day's paper called, American Indians
16 and Social Policy, the trust doctrine includes
17 duties to manage natural resources for the benefit
18 of tribes and individual Indian landowners and the
19 federal government has in some cases been held
20 liable for damage caused by mismanagement.

21 There's a thing that you have in
22 your government called the doctrine of trust
23 responsibility. It's one of the most important
24 concepts in Indian law between 1787 and 1871, when
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2 the U.S. entered into hundreds of treaties with
3 tribes and almost all of these Indian tribes gave
4 up land in exchange for promises made by the U.S.
5 Government. The Supreme Court has held that these
6 exchanges created a trust relationship. The
7 promises created a duty of protection toward
8 Indians. The Indians trust the U.S. to fulfill the
9 promises which were given in exchange for land.
10 The federal government's obligation to honor this
11 trust responsibility and fulfill its treaty
12 commitments is known as its trust responsibility.
13 U.S. E.P.A. did not engage in this federal trust
14 responsibility on behalf of the U.S. government
15 when the G.M. sites of contamination were under
16 study. We asked for full removal of all
17 contaminants from this site. G.M. wanted minimal
18 cleanup and U.S. E.P.A. folded on this. We at
19 Akwesasne will live with their decision to leave
20 contaminants on-site and capped. The trust
21 responsibility was broken.

22 The U.S. E.P.A. did not engage in
23 this federal trust responsibility on behalf of the
24 U.S. government when Reynolds Aluminum sites of
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2 contamination were under study. We again asked for
3 full removal of all contaminants from the site.
4 Reynolds Aluminum wanted minimal cleanup and U.S.
5 E.P.A. folded on this. We at Akwesasne will live
6 with your decision to leave contaminants on-site
7 and capped. And again, the trust responsibility
8 was broken.

9 Now we have ALCOA. It's an
10 opportunity for you, E.P.A., to now fulfill your
11 trust responsibility. We have trouble trusting the
12 U.S. and you've heard that tonight. We expect the
13 federal government to honor its obligation to this
14 trust responsibility and to fulfill its treaty
15 commitments and as known as its trust
16 responsibility. ALCOA and G.M. can bear the costs
17 of cleanup because, after all, this is merely a
18 cost of doing business. There will be tax cuts and
19 there will be other financial compensations for
20 this cost. It's a cost of doing business. They
21 can bear the financial brunt of their industrial
22 actions, but what will Akwesasne have?

23 G.M. did not provide any
24 financial compensation to us and fought any actions

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2 by our community to address to loss of our basic
3 rights to hunt, fish, gather, and plant food for
4 our families that is not laden with contaminants.
5 Now our people face new life threatening illnesses
6 that lawyers say cannot be directly linked to the
7 specific contaminants existing in our environment.
8 And you've heard some of those instances tonight.
9 The burden of proof rests with us, people who do
10 not have the financial resources to prove it. We
11 have treaties with the U.S. government, but these
12 treaties don't give us rights. They uphold our
13 rights that we never relinquished, the right to
14 govern ourselves, the right to religious and
15 cultural freedom, the right to hunt, fish, and
16 gather. They also obligate the U.S. and the U.S.
17 E.P.A. to fulfill their duty to protect us, the
18 Mohawks of Akwesasne, our land, waters, animals,
19 and plants, and air from the industries that are
20 attacking us.

21 You can accomplish this by not
22 folding this time to the political pressure and
23 make ALCOA spend what it takes to remediate, to
24 fully remediate, to remove all the contaminants and
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2 restore this to the pristine land and waters that
3 it was prior to the contamination. My family, my
4 children, my grandchildren, and all our future
5 generations depend on you to fulfill your fiduciary
6 responsibility. We're still here. Our treaty
7 rights still exist and your obligations are still
8 there. Thank you.

9 MR. KLUESNER: Number
10 twenty-three?

11 UNIDENTIFIED SPEAKER: I want to
12 point out a couple things that you guys left out
13 here tonight. Is there any Canadians here? Well
14 it's like you Americans, you draw a line, stick
15 your ass on this side, and you shit in the -- all
16 your garbage goes down river. Down river from
17 ALCOA, there's about two to four million people
18 drinking out of that water that you guys are
19 polluting every day. You still polluting it? And
20 what about that big mound? I haven't heard nothing
21 about that big mound of P.C.B. that you guys are
22 left over there. And I went to this -- I went to
23 this meeting in Sonoma Desert down in Mexico and --
24 and the P.C.B.s that we're banning here in the
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2 states got taken down there and dumped all over
3 the Natives down there, all over their gardens.
4 And the babies came up, you know, mushy brains.
5 And I've been down to our sister communities.
6 We've got over here down river. You guys are
7 polluting them too. You guys should take your --
8 take your game over there and meet with them people
9 over there also. And meet with all the people down
10 this river that you guys are polluting their
11 drinking water. There's four to six million people
12 that you guys are poisoning forever. Yeah, you
13 guys should just close the plant, leave town, and
14 leave our land. Go back to your own land. France,
15 Italy, England, ain't that beautiful land over
16 there? Go over there and mess their land up.
17 Thank you.

18 MR. KLUESNER: Number
19 twenty-four? Twenty-five? Twenty-four,
20 twenty-five, twenty-six?

21 MS. THOMPSON: My name is Neddy
22 Thompson. (Indistinguishable) is my Mohawk name.
23 And I lived here all my life. I watched those
24 factories grow along with me. The elders are gone.

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2 And they all died, passed on with cancer, thyroid,
3 and everything else that come with the chemicals
4 coming from the factories. This past year, I -- I
5 have tumor in my kidney and I went to this doctor
6 in Canton or Potsdam. His name is Dr. Buscemi and
7 he told me he wanted to just cut it out, but he
8 told me there was a -- a kidney stone in there and
9 he says well, I'll cut that out, too. Then he
10 said -- I said well if you do that, what's the
11 chances of me going on dialysis, you know, because
12 last year I got my other kidney is gone and I had
13 that taken out last year. But I had to walk away
14 from him and -- and just look for a second opinion.

15 But as I walked downstairs in the
16 lobby, I came out of the bathroom and I looked on
17 the wall and Need Horse (phonetic spelling) was
18 with me and he says look at this plaque on this
19 wall. And right on top of it was these foundations
20 and the first one was ALCOA. And I said well this
21 guy's not going to work on me. And I think you
22 should think of our people better and get us some
23 really good doctors because I'm not going to stop
24 right there. I'm going to look for a doctor that
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2 will help me and cure this cancer that I have.

3 UNIDENTIFIED SPEAKER: I've got
4 to give you an outside look in. I have been doing
5 a lot of traveling. I've went to a lot of tribes.
6 I've met a lot of tribes and I've noticed -- well
7 not really noticed, but I know for sure that all
8 these companies, they'll build upstream and to the
9 west of you, and that causes a lot of problems.
10 And before Neddy found out that she had the cancer
11 and the tumor, we sat down and we was talking, and
12 I said I've never been to a place that's had this
13 much heart disease, this much cancer, kidney
14 problems, thyroid, diabetes. I've never seen that
15 before in my life. It didn't take me but a day
16 just to find out where it was coming from. I mean
17 the plants up there, those huge mound, they'll burn
18 your eyes, hurt the back of your throat like it did
19 mine because I'm not used to it. And -- but the
20 people around here said that they were used to it.
21 That's why it didn't affect them like it did me.

22 But you know, Akwesasne, I mean
23 the people here, ALCOA and the lawyers, it's not
24 their land. You know, so why would they really you
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2 know care about what happens to your children? And
3 they don't. So the best thing for them to do is
4 whenever I heard three hundred million, you know, I
5 kind of laughed. I said three hundred million,
6 that's -- you know what the company's worth. I
7 mean just the shares, stock, everything. I said --
8 who was it -- the V.P., you know, they just now
9 they're having to pay four point five billion and
10 they're going to make that up in just contracts.
11 It's not a big deal to them. Same thing with
12 ALCOA, they'll make the money back. And three
13 hundred million is just like thirty cents. You
14 know, it's not any large amount of money.

15 But I just wanted to let
16 everybody know that you have to take care of your
17 own land, like most of the people here are. A lot
18 of people here in this room are leaders of the
19 community and they all -- they're all here.
20 They're all speaking to everybody here. They're
21 all letting you know how they feel. You've heard
22 the songs. You heard them talk about the animals,
23 the plants, the water, the land, everything. It's
24 all part of this. And it's direct reflection of
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2 what is happening to the land, happens to us and
3 anything we do, anywhere we go, anywhere in the
4 world, whatever happens in that area happens to the
5 people, and the damage that's being done and has
6 been done has been going on for quite a while and
7 I'm sure the E.P.A., which did studies twenty years
8 ago, and started studies, knew this was happening.
9 So the E.P.A. is right there with them. I mean you
10 just have to be awake and listen to what's
11 happening. They'll tell you.

12 They'll also tell you this
13 armored capping will do something. It's not going
14 to do much. Like Josh was saying, it's going to
15 seep through. The water will move it. The ice
16 will move it. It will still come through. The
17 only thing you can do is to divert the river. Let
18 it -- let it dry up. Clean it up that way. Then
19 come back. Use something like that. But to try to
20 dredge it while the water's moving, just going to
21 push it down here further to you, quicker to you,
22 and it's going to expose it more to you and to your
23 children. A lot of children I know don't even know
24 really what's going on. So we have to educate the
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2 children with everything, even with the medicines.

3 But that's all I have to say on
4 that.

5 MR. KLUESNER: Thank you.

6 Twenty-six? Were you twenty-six?

7 Twenty-seven? I think we have --
8 I believe we're up to like thirty-three, but
9 anybody -- we have six or seven more, but
10 everybody's going to have a chance to talk, even if
11 you haven't signed up. So twenty-seven, you ready?
12 Twenty-six or twenty-seven, if I missed you.
13 Sorry. What number are you? You're twenty-six.
14 All right.

15 UNIDENTIFIED SPEAKER: My name is
16 (indistinguishable) I can't repeat everything that
17 has already been said, but I just want to let you
18 all know that I support the option or Proposal
19 Number Ten. I want it out of here. I have little
20 ones that I worry about. Tonight's been really
21 emotional, listening to my leaders and my
22 community. And I just want to let you know that I
23 support this total cleanup of the river because the
24 land doesn't belong to me. I'm not a part of this
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2 land. I'm not an owner. It belongs to my children
3 and it belongs to my grandchildren. And I'm tired.
4 I am very tired of hearing these excuses and I'm
5 tired of worrying about my kids. I'm tired of
6 worrying about my cousins.

7 So I'm not asking that it be a
8 complete cleanup. I'm telling you that it needs to
9 be done and this is coming obviously from my heart.
10 So I want a brighter future for my children, of
11 course. We all do. I'm sure you have
12 grandchildren. I'm sure you have children. We all
13 want a brighter future for all of our children and
14 we all want them to live a healthy life in their
15 future. And what I see happening in this community
16 scares me. I wonder if my -- my sons are going to
17 be able to have children or if they're going to
18 have to go -- or maybe if their wives are going to
19 have to run off to fertility clinics.

20 My sons are fishermen already.
21 From the day that they first cast that rod into the
22 water, the lure into the water, they were hooked.
23 And it's just proof that it's in us. Our
24 livelihood is in the land. It's in our culture.

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2 It's in our traditions and it scares me to lose it.

3 So I support the Option Number Ten. My whole

4 family does. My mother, my father, my sisters, my

5 aunts, my grandmother, my entire clan supports the

6 Option Number Ten and I hope yous -- I hope yous do

7 to. Thank you.

8 MR. KLUESNER: Twenty-seven?

9 Twenty-eight? Twenty-nine?

10 MR. BONAPARTE: My name is Darren

11 Bonaparte. I'm kind of a history buff here

12 locally. I just want to thank my fellows. You

13 made me real proud tonight. People spoke from the

14 heart and even sang from the heart and made me feel

15 good. If I fall face first on the floor, it's only

16 because I didn't eat supper. I wanted to be here.

17 And I think I got Clorox poisoning earlier and I

18 was on the 401 for four and a half hours today. So

19 I'm not -- I'm not in my right mind.

20 But I totally back up everything

21 everybody said. I want the -- the most thorough

22 cleanup possible. I won't settle for anything

23 less. And I really don't have a lot to offer,

24 other than a little bit of a -- a little glimpse

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2 into our history. After the American Revolution,
3 Great Britain kind of abandoned all her allies and
4 said we're out of here. We've had enough.
5 America, have it all. You know, bye. And then
6 they drew a border on a map and said, all right,
7 this is British territory. That's American
8 territory. That map did not have a little black
9 dot for Akwesasne. They drew that line right
10 through us. And then when they came to survey it,
11 they said oh, what's this Indian Reservation here.
12 And they said, oh, don't worry about it, they'll be
13 gone in no time, they'll fade away, or they'll move
14 west. But don't worry about it. Progress must go
15 on. And so they drew their line.

16 And when the Indians said, what
17 are you doing? who are all these people here?
18 They said, oh, this line doesn't apply to you.
19 It's eight feet tall. And no Indian will ever grow
20 to be eight feet tall. I doubt that. I think
21 that's coming. And it will never affect the
22 Indians. It comes up on the edge of their res and
23 goes way up and then comes back down. It's meant
24 for the white people. And we're like, oh, okay,
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2 that sounds good to us. You know we'll be like the
3 squirrels and all the fish. It doesn't apply to
4 us. We'll just run and have a great time.

5 Then all of a sudden we get word
6 that oh, they've just sold huge tracts of your
7 land, except six miles square around your village.
8 So we sent runners to find out what that was all
9 about. And they said, oh, you don't have a claim
10 to this. There's other Indians that claimed this
11 land and you're out of luck, Chief. And then they
12 said -- you know, they went back over and over to
13 get some justice. And finally they said, well,
14 since we're good neighbors to you, we don't agree
15 that you have any kind of claim whatsoever, but
16 we'll agree to reserve that six miles square for
17 you and a little square in Massena and a little
18 square in French Mills, now Fort Covington, and the
19 Grasse River meadows leading to the little mile
20 square in Massena because our chiefs demanded that.
21 They said we still use that. If -- you're taking
22 everything but at least give us this little bit
23 more. So they said, all right, we'll talk to the
24 people that we sold the land to and see if they're
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2 okay with it. And they were okay with it and so we
3 got an extra little check. So I notice as I'm
4 looking at this map, there's something missing.
5 There's no -- the word Akwesasne does not appear on
6 this map. Nowhere. You've got every other road.
7 There's no Akwesasne anywhere.

8 well the federal government in
9 supporting Mohawk land claim, takes the position
10 that the sale of those lands because they did not
11 have the proper federal approvals are null and void
12 and they backed Akwesasne up repeatedly throughout
13 the lands claim process until that basically
14 dissolved around their feet. And so everybody's
15 saying that's all done with, ha ha. We're home
16 free now. No more land claims. Well the
17 underlying issues are still there. We still have a
18 federal treaty that says that's all Akwesasne. The
19 Grasse River, Akwesasne. The meadows along the
20 Grasse River, Akwesasne. The mile square in
21 Massena, which the plant is on, by the way. I
22 don't know why you guys are still paying your
23 taxes. That's reservation territory. No, you
24 should be kicking them off. That's Akwesasne.

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2 It's time our leadership start acting like it's
3 Akwesasne. You know, stop calling it land claims
4 area. Bullshit. Call it Akwesasne. It's shorter.
5 It's easier to say. So let's see that.

6 And why was that river so
7 important to us in the old days? If you follow
8 that river way up past Canton, it comes to Indian
9 Creek. And you go through Indian Creek, it leads
10 to the Oswegatchie River. Oswegatchie River goes
11 all the way to Ogdensburg. We had another
12 settlement there, called (indistinguishable).
13 That's where a lot of the Snipe and deer Clan
14 people here in Akwesasne -- I'm the Snipe Clan.
15 There was a settlement of Onondagas that lived
16 there. And that was the route to get to -- to get
17 to Oswegatchie, through that river and then to go
18 through the Indian Creek, then on to the other
19 settlement. To come home, you go on the St.
20 Lawrence, which is a much swifter current, but that
21 was the easy route. That was the good hunting.

22 And when they researched the
23 Grasse River and the Raquette River, they find all
24 kinds of evidence of aborigine use of it, really

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2 extensively. And it's all been kind of covered up.
3 You read the history of Massena, the books -- a
4 couple of books have been published recently. What
5 does it say about the Indian history? Almost like
6 two or three sentences at the most. They say, oh,
7 yeah, some Indian pointed out the springs at
8 Massena springs, and said oh, the mud smells bad.
9 Wow. That's it? That's all we get? We're the
10 landlords. I don't buy that one bit.

11 I went to the Akwesasne -- the
12 Massena Museum. Somebody said, oh, they have this
13 really beautiful dug out canoe that somebody found
14 on one of the rivers, go take a look at it. So I
15 go to the museum, looking around. All I see are
16 ALCOA artifacts. Everything you can conceive of
17 made of aluminum. All there. And I thought wow,
18 so where's the canoe? And I asked the lady working
19 there. She says let's go look in the basement. So
20 we go looking in the basement and we find it piled
21 up under boxes on a shelf in the dark. We're just
22 whitewashed right out of that history, like we
23 never existed.

24 Well, I'm sorry, but we exist.

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2 We're still here. We didn't fade away. We didn't
3 move west. We stuck it out. We're still here.
4 Still doing our duties. You saw that tonight, all
5 the people that got up and speak. That was
6 something else. I hope somebody was recording all
7 that because that was beautiful. And it makes me
8 real proud to see our people fighting. When I
9 pulled up here, I saw all these cars. I thought it
10 must be bingo night. We must be meeting in that
11 small room. No, it's a good showing of our people.
12 I should have expected that. I don't know why I
13 didn't. They're all here and they're all taking a
14 stand and they're not backing down. And I stand
15 with them.

16 Now I don't often quote Dave
17 Matthews songs. He's got this song called Grave
18 Digger. He says grave digger, when I die, bury me
19 just below the surface so that I can feel the rain.
20 Well in our teachings, when you die they bury you
21 so you can return to the earth, so you can be part
22 of that cycle of regeneration. And what that
23 gentleman said earlier today, I decided that I'm
24 going to write a will that says that I want to be
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2 cremated, if not incinerated when I die. If I'm
3 loaded up with P.C.B.s, then I'm toxic waste, just
4 like that turtle they found that was so loaded with
5 P.C.B.s they had to incinerate it. Couldn't burn
6 it. Couldn't bury it. Is that what our people are
7 going to be, just toxic waste? What a horrifying
8 thought.

9 So I'd like to see some
10 recognition that you're talking about Akwesasne
11 here. This is not -- we're not just off the map,
12 you know. This is really Akwesasne. And our
13 people were able to scrounge that out of a really
14 desperate time where we lost so much. You know,
15 they fought, they held their ground. It wasn't
16 much compared to the million of acres that we used
17 to control. And they got home and they got shit
18 for it. People gave them flack and their names are
19 kind of in disrepute, even to this day among some
20 people. But they did the best they could. They
21 got a little bit more. And so we have to fight for
22 every last inch you know. Nobody's going to fight
23 it for us. And our people are fighters. My last
24 name is Bonaparte. I just found out not too long
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2 ago that the name -- we got that name because my
3 ancestor's name was John Cook. When he went to the
4 Civil war to fight for America, they said ah, put
5 own nickname down instead of Cook because there's
6 too many Cooks. You get confused. You might not
7 get your pay. So they said -- they used to call
8 him Bonaparte because he used to fight a lot when
9 he was a kid so he signed his name John Bonaparte
10 and we've been Bonapartes ever since. Not because
11 Napoleon came here and had kids. So -- and there's
12 a lot of veterans that were here and they've always
13 fought for America, no matter what war, world war
14 II. There's guys probably out there right now in
15 Afghanistan and places. So we're not some little
16 park safari here or something of Indian people.
17 we're among you. We're you, you know. We can't be
18 taken out of this equation. We're your landlords
19 and we're going to start acting like it. Right,
20 chiefs?

21 All right. I like to hear that.

22 All right. Thank you.

23 MR. KLUESNER: Number thirty?

24 Thirty-one? Thirty-two? I think that was it. The
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2 gentleman over here. I'll ask you first and then I
3 get -- oh, you have thirty-four. I'm sorry. I saw
4 thirty-three on the table. You want to come up?
5 Sorry about that.

6 MS. LOOMS: Hello. Hi, guys.
7 Glad to see you're all here. My name is Joe Looms
8 (phonetic spelling). That translates in English to
9 she's debating. Now I'm debating. It's very
10 appropriate. I'm debating whether to be pissed
11 off. whether to welcome you all. whether to be
12 cordial. But you know, I lean mostly toward I'm
13 going to have to be truthful. I'm sitting here
14 listening to everybody talk and share about
15 their -- the history and the experiences of the
16 stuff, and I never even took a really good look at
17 the map. But, yeah, Akwesasne; right? I don't
18 even want to stop there with just this little tiny
19 map. I want the whole -- all of it. I was raised
20 to be a proud Mohawk woman, a proud woman, with the
21 Bear Clan. I was raised to believe that I would be
22 living healthy for seven generations, and that my
23 children, my children's children, they would be
24 chiefs, they would be clan mothers, they would hold
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2 a voice in this community, they'd be strong. I was
3 raised to believe that I was, as a traditional
4 person, that our culture would reign high and that
5 we were always to hold our head up and be proud,
6 our heritage being such. I was taught as long as
7 that grass grows, you heard the Johnny Cash song,
8 when the river flows and wind blows, sun shines,
9 all that wonderful stuff, as long as that goes, as
10 long as there's one last Native left alive, we hold
11 entire -- all the entire territory of North
12 America. It doesn't stop right here with that
13 little tiny map. What? Come on now, you don't
14 live in a fairy tale land. You don't believe in
15 fairy tales so much; right? Believe it's going to
16 be a fairy tale if you think we're going to swallow
17 this line of crap. Excuse me. Did I say crap out
18 loud?

19 what I want to say is that
20 basically let's get right down to it. I wanted ten
21 children. I wanted to be a strong mother here in
22 the territory. After four children, every one of
23 those children had respiratory problems. I was in
24 school. I continued to get my education and then
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2 he put me on the remedial action plan committee.
3 what the hell? And I'm looking at this stuff and
4 I'm learning more and more and more. And then the
5 next thing you know, the St. Regis Mohawk Tribe,
6 they're going to put all this immunological study.
7 we're going to go, we're going to test the people,
8 we're going to test the women of childbearing age,
9 we're going to test the blood, we're going to do
10 all these tests, questionnaires, up the ying yang.
11 I'll tell you what. It was a lot of information.
12 And then the test results, well, we'll get back to
13 you.

14 They did get back to me. You
15 have five point seven parts per billion in your
16 blood. Say, what is an acceptable level? Can you
17 tell me that? what is an acceptable level? I
18 was -- the people over here, the Raquette River, I
19 was the neighbor. I never even thought of this
20 stuff. I never even thought of this stuff was
21 going to come down. I never even thought about the
22 watershed or ecological systems. I never even
23 thought of that. All I wanted was to be a mother,
24 take care of ten beautiful children that I had

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2 planned to have. But after seeing four, all of --

3 all of the trouble -- and it's right in the

4 immunological study. People mentioned it, all of

5 the side effects of all this wonderful stuff.

6 Sure, everybody is mad. Sure, everybody's angry.

7 Then I come to find out that I

8 have cancer. Well, how did that happen? Well you

9 know, we looked into that and we chased it. You

10 know, it's just one of those things that another --

11 you ever hear of when a person has the platter and

12 he put all his stuff up on that platter, all woes

13 go on that platter, and then carrying that. You

14 know it's bad enough growing up in this territory

15 as a Native American woman and have to put up with

16 all the looks -- you know, the look when you come

17 into a room. It's like a black man at a Ku Klux

18 Klan convention. He's noticeable, so everybody

19 turns and looks. So I'm trying to put up with

20 that. Okay. It's just because it's a different

21 culture. I try to be understanding, try to be

22 forgiving, try to be patient. You know, I have to

23 put up with all that and then all this cup of tea

24 is served to me? What the --? And they want to

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2 take everything and -- and just take it away
3 because it's all cancer now? And they want to take
4 it away. What about all my dreams? My hope for
5 the future? What about my ten children that I
6 wanted? What -- who do I argue with? Who do I
7 tell? Who do I complain to?

8 I'm a damn good mother with the
9 four, with all of their medical problems. I wanted
10 six more. I would have been a very capable mother.
11 I'm a very strong mother. I'm a very smart mother.
12 And you know what, I went to go get educated in
13 your -- in your world. I have triple master's
14 degree. Well what good is that to a woman that
15 can't have the children? Where am I going to be
16 happy? Where am I going to find happiness? I
17 learned all your stuff. I learned all the
18 politics. I learned what makes people tick. But
19 you know what? All of that, and all of that stuff,
20 like they said before me, none of it is as
21 important as having healthy children for seven
22 generations to come. And I'll never see that
23 because I'll probably be gone long before that.

24 Oh, they said, oh, we think we

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2 got it all. We think it -- we think you're going
3 to be okay. Okay. Well you look at it. I'm only
4 a young woman and I'm having hot flashes. Isn't
5 that supposed to be like the older ladies? You
6 know, isn't it supposed to be -- I'm only young and
7 I'm having these. And my doctor says oh, you won't
8 be able to lift any more than five pounds. I said
9 okay, for how long? He said well, for the rest of
10 your life. I said, excuse me, this is
11 unacceptable. I'm a working woman. I'm a hard
12 worker. I'm -- well some call it workaholic. I
13 think it's just an excuse because they want to be
14 lazy. But to me, I'm a hard working woman and
15 there's my life. There it goes. There goes my
16 dreams. What the hell, I can never be president of
17 the United States now. I don't think I'll live
18 long enough. Hey, if you're going to let everybody
19 else in, might as well open the gate. Let's make
20 the Native American the president. Let's see how
21 that comes down. You guys will probably never
22 invite us to supper. You know what I mean? You,
23 you, and you, hey, yeah.

24 You know and it's not so much

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2 like Native against non-Native. It's not that at
3 all. We know you got to live somewhere. But you
4 got to respect the home you live in. You got to --
5 you can't come over and stick your flag in the
6 middle of my living room and say oh, I'm declaring
7 this, you know, in the name of the queen or the
8 king or somebody over there. That's a direct
9 insult. And then you wonder why I was upset about
10 that.

11 well anyway, let's not get down
12 to the small issues. The idea is you want to clean
13 up that stuff, you want to do the good job, you
14 want to try to do the right thing by the people,
15 that's very admirable of you. And I wish you a lot
16 of luck and my prayers can go with you, but I'm
17 going to tell you one thing. When it's going to
18 come all the way down and you talk about, you know,
19 I'm going to let my Creator take care of that,
20 because I don't want to get even with you. I don't
21 want to sue. I don't want to do none of that. I'm
22 just going to let my Creator take care of that and
23 however he lets the chips lie, good luck guys.

24 It's a hard road. And I, too, would like to see

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2 nice clean water where I could drink again and not
3 have to do the bottled water anymore. That's
4 contaminating the earth again with that plastic you
5 know. Anyway, I think I've said enough now. Now
6 you probably all want to lynch me now. But it's
7 all right. I'm glad you're listening and hopefully
8 you heard me. Thank you.

9 MS. KLUESNER: Does anyone else
10 have a card -- number? All right. The gentleman
11 over here?

12 MR. PHILLIPS: I'll be short and
13 sweet here. My name is Todd Phillips. Nobody
14 touched on the aspect of where ALCOA gets their
15 power from. I just happen to be working for the
16 New York Power Authority, going on thirty years.
17 And I'm very much aware of the situation with how
18 many megs of power you guys get as opposed to how
19 much employment or employees you hire. I'm very
20 much aware of that. In the future, I guess maybe
21 it's next year, you folks are planning to extend on
22 six hundred more million dollars worth in your
23 plants over here. I'm not sure what that figures
24 out to as far as the people you need to employ

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2 there. I certainly hope before you do that, that
3 you at least take a look out here what the damage
4 has been done since the '50s here.

5 I understand Massena Electric --
6 Massena Electric, at one time, was going to build a
7 small three megawatt power plant down there three
8 or four years ago. But they never got the license.
9 So with that being said, I think everybody else has
10 talked about land claims and what we own. And some
11 people maybe don't know that we actually own
12 Barnhart Island also as part of the land claim,
13 which is the big power generating plant we have
14 over here. In this charter, it says it's supposed
15 to give power to Vermont, Massachusetts, and a big
16 chunk of it goes to New York City. A small chunk
17 of it stays up here for our use. I don't want to
18 say our use. It's probably your use. You know, we
19 don't ever see one. We've been fighting for a long
20 time for a mere nine megs of power -- a mere nine
21 megs, you know. That's peanut stuff according to
22 the statistics we have over there. And I have a
23 little booklet at home. It's a public power book
24 regarding how much revenues it has made in the past
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2 year and we can't even get a part of that.

3 But anyway, just in closing, just to keep you
4 people on guard somewhat, we understand -- I see
5 you moving your feet there a little bit, so I hope
6 that doesn't mean anything, but anyway, you know,
7 be -- be aware that I'm very much aware of your
8 situation with the power dam over there and what
9 you folks need for power with your expansion coming
10 up. And I hope the leadership takes a better lead
11 role on this you know, making sure that the people
12 that live here might get nine megs of power
13 someday. I think we're asking for fifteen megs.
14 That was according to our 2003 agreement in the
15 land claim settlement with the State. So thank you
16 again.

17 MR. KLUESNER: Thank you.

18 Does anyone else have a -- would
19 like to make any comments or ask questions? Yes,
20 sir.

21 MR. HASSIG: Department of
22 Health, my question for the New York State
23 Department of Health is this, and it's this lady
24 right here. You're with the New York State
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2 Department of Health; right? why is it that our
3 group, Cancer Action New York, has been in
4 existence since January of 2000, and we started
5 very early in that time asking the New York State
6 Department of Health to warn the people of New York
7 State, including the people here at Akwesasne,
8 Massena, especially them, about the presence of all
9 these chemicals, not just P.C.B.s, the presence of
10 the P.C.B.s and flame retardants and the dioxins
11 and all those chemicals, in the animal fat people
12 have to buy in the supermarket because they can't
13 fish anymore, they can't eat those fish because
14 they're contaminated, so they have to buy that
15 other stuff that is contaminated -- why is it that
16 the New York State Department of Health still
17 refuses to do any education on that, even in a
18 place like this where you've heard about all this
19 suffering, a huge amount of suffering? You know
20 why wouldn't it be the right thing to do, to do to
21 warn them about avoiding an avoidable health
22 hazard? You know, what's up with that? Can you
23 just explain?

24 UNIDENTIFIED SPEAKER: What I
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2 would have to say is that it's not regulated by the
3 New York State Department of Health. It's not
4 actually regulated by the New York State Department
5 of Health so I can't really speak to -- to that
6 specifically.

7 MR. HASSIG: But it is -- it is
8 regulated by the New York State Department of
9 Health. They're responsible for protecting the
10 public health. It's their basic mandate. How
11 could she possibly say that they're not involved,
12 you know, warning people about health hazards? The
13 whole idea of public health is if there's a health
14 hazard that's understood, you warn people about the
15 health hazard so they can avoid the exposures.
16 These people have had horrible exposures. Neddy
17 has, you know, one kidney gone and there other one
18 has a problem. There's all this talk about heart
19 disease and diabetes. There's sixty-five percent
20 diabetes here and the New York State Department of
21 Health is not going to warn the people about the
22 avoidable exposure of the P.O.P.s in the mainstream
23 food supply. That is totally ridiculous. That is
24 not true.

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2 UNIDENTIFIED SPEAKER: I

3 think --.

4 UNIDENTIFIED SPEAKER: No, it
5 was -- what we do in my Bureau of the New York
6 State Department of Health is we assist other
7 agencies in investigating hazardous waste sites and
8 the contaminants that are associated with it. And
9 it is our goal to educate the community as to what
10 possible and potential exposures are associated
11 with those sites. As far as what's in the grocery
12 stores, the reason I can't speak to that is that's
13 not regulated by us. The F.D.A. is -- is someone
14 that does that. So you know, we certainly do try
15 to -- to educate everyone about anything that we
16 know about with exposures related to sites that are
17 all around New York State.

18 MR. HASSIG: It's not enough.
19 It's not enough to tell them to avoid that one
20 little part of the store. We have P.C.B.s and
21 P.C.B.s in Grasse River, that's just only such a
22 small part. It's huge -- it is huge, but it's not
23 as huge as the contamination of all the food, these
24 chemicals, because of all the use of the chemicals
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2 out in Michigan and the chemicals out in, you know,
3 Alabama. All the places where the P.C.B.s are
4 used, all the places where the dioxins were
5 manufactured, Agent Orange with Vietnam, all that
6 chemical use, the flame retardants where they make
7 them, all the D.D.T., when you put that all
8 together that is so much bigger than just the
9 P.C.B.s in the Grasse River. And these people have
10 suffered the P.C.B.s in the Grasse River so why
11 don't they deserve to know about the whole story?
12 You know the major part of the harm that's sitting
13 there right ahead of them and it's causing disease.
14 You know, that's my point. And sure, your
15 particular division doesn't have responsibility,
16 but certainly Commissioner Shah, Commissioner Shah
17 indeed, Commissioner of the New York State
18 Department of Public Health, his mandate is to
19 protect the health of people in New York State and
20 it's his job to warn the people of Massena, people
21 of Akwesasne, me, you know, everybody, everybody
22 that's a resident of New York State about that
23 avoidable health hazard, when there's all these
24 other health hazards that they can avoid.

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2 They got to breathe here. They
3 get to breathe the P.C.B.s that are coming from the
4 wind, you know, from upwind, there at ALCOA and
5 former Reynolds, the ALCOA East now, and the G.M.
6 They got to breathe that. They can't stop
7 breathing, but Dr. Shah with the New York State
8 Department of Health, he could just say look, you
9 don't have to eat that animal fat. You don't have
10 to eat that animal fat at the supermarkets. It's
11 got P.C.B.s and dioxins and flame retardants in it.
12 And the World Health Organization is saying it's
13 contaminated to the extent that kids shouldn't be
14 eating it. Well why shouldn't the kids of
15 Akwesasne know that? why shouldn't the kids be
16 told by Commissioner Shah that they should not be
17 eating the animal fat that's present in the world
18 because of all the total use of the P.C.B.s, not
19 just ALCOA, not just G.M., not just G.E., you know,
20 down the Hudson River. The total use of all those
21 chemicals. That's what people get exposed to when
22 they're eating.

23 MR. KLUESNER: We could talk for
24 hours on that subject. Is there one more comment,
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2 sir?

3 UNIDENTIFIED SPEAKER: I got two
4 questions. I don't know who can answer this, but
5 it's open to one of yous. When you put your zip
6 code, say like Hogansburg, New York or Rooseveltown
7 to find out what the cancer rate is in that area,
8 it don't come up, but you put your zip code
9 anywhere else in New York State, it will tell you
10 how many people in the area have cancer. Anybody
11 can answer why it is like that? On the Internet,
12 it ain't nowhere.

13 UNIDENTIFIED SPEAKER: I might be
14 able to shed a little bit of light. Are you
15 talking about -- are you speaking about on the New
16 York State Department of Health website, where
17 there's a cancer surveillance maps that were up a
18 few years back by zip code? Right. That --
19 basically there's a cancer registry that is
20 maintained by the New York State Department of
21 Health. And when -- when there's a cancer
22 diagnosis, the hospital reports that to the cancer
23 registry and reports the -- the -- the results, the
24 location of the person who is diagnosed. And to
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2 protect the confidentiality of the -- the people
3 who have been diagnosed with cancer, it's -- it's
4 gone to zip code level because we couldn't put --.

5 UNIDENTIFIED SPEAKER: I don't
6 want to know names. I just want to know the
7 numbers.

8 UNIDENTIFIED SPEAKER: Right.
9 Right. And I -- I can't speak to the specific --
10 you said there's nothing on Hogansburg? Well what
11 I'll -- what I'll do is I'll take a look at that
12 and I'll speak to the people that are in my
13 bureau -- or not my bureau, but -- to try to answer
14 your question a little bit better. Let me -- let
15 me give you my card so we can discuss.

16 UNIDENTIFIED SPEAKER: One more
17 question. Probably to ALCOA. I used to go there
18 at the dump in that area on the south side of the
19 plant. My question is this big mound, does that
20 have an underlining on it?

21 UNIDENTIFIED SPEAKER: Are you
22 talking about General Motors or ALCOA?

23 UNIDENTIFIED SPEAKER: ALCOA.
24 Well Reynolds -- formerly Reynolds. Where the gate
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2 is, where you go into the back of the building. If
3 you were coming out, it would be to your left and
4 then you had another dump kind of straight to your
5 right a little bit. And then --.

6 UNIDENTIFIED SPEAKER: There's
7 three sites. Which one are we talking about?

8 UNIDENTIFIED SPEAKER: A and B.
9 And then the highway would just be further south.
10 My question is does that big mound or any of them
11 have an underlining?

12 UNIDENTIFIED SPEAKER: At the
13 Massena East plant, there's -- it's sitting on
14 clay.

15 UNIDENTIFIED SPEAKER: Pardon?

16 UNIDENTIFIED SPEAKER: At the
17 Massena East plant, the landfill is on clay.

18 UNIDENTIFIED SPEAKER: It's on
19 what?

20 UNIDENTIFIED SPEAKER: Clay,
21 C-L-A-Y.

22 UNIDENTIFIED SPEAKER: Clay? So
23 there's no lining other than clay?

24 UNIDENTIFIED SPEAKER: It's a
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2 clay lining.

3 UNIDENTIFIED SPEAKER: Is that
4 the norm?

5 UNIDENTIFIED SPEAKER: It was
6 what was designed and permitted for that particular
7 landfill.

8 UNIDENTIFIED SPEAKER: Does the
9 clay break down after a while? E.P.A. can answer
10 that? Clay breaks down after a while; right?

11 MS. CHANG: I can't really answer
12 that question. And also, the Reynolds site, the
13 landfill at the Reynolds site, I don't have the
14 details regarding that.

15 UNIDENTIFIED SPEAKER: Could you
16 find out?

17 MS. CHANG: Sure.

18 UNIDENTIFIED SPEAKER: How long
19 ago --?

20 MS. CHANG: You want to know --
21 you want to know if the landfill that's at the old
22 West --

23 UNIDENTIFIED SPEAKER: Any of the
24 three.

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2 MS. CHANG: -- site, if it has a
3 liner?

4 UNIDENTIFIED SPEAKER: Yes.
5 Protective liner.

6 MS. CHANG: I know that the
7 landfill that was constructed, that will need to be
8 expanded for any amount that's dredged out of the
9 Grasse River site. The landfill that's there
10 currently at ALCOA West plant, that was built to
11 code. And I believe that was part of it --

12 UNIDENTIFIED SPEAKER: We're
13 talking about Reynolds only.

14 MS. CHANG: Okay. I thought you
15 just said all three sites. I'm sorry. The other
16 site, the Reynolds site, I don't have the
17 information, but I will get you the information and
18 I will respond to your question.

19 UNIDENTIFIED SPEAKER: Because a
20 command will go in that direction too, to remove
21 all that. If there's three mounds there, then
22 three mounds. And they'll be -- they'll come into
23 ALCOA and Reynolds with regard to rent from the
24 landholders -- landlords. You just have to sit
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2 down and calculate as to what it costs you to
3 initially put the buildings up, how much profit
4 he's made from the beginning of that time until
5 today. So we have talk about the past, present,
6 and future, both of Massena, halfway back to the
7 reservation, that these are currently on Indian
8 land and I can prove that. Beyond a shadow of a
9 doubt, it's still under union title -- original
10 union title. So we need to sit down and I'll give
11 you the documentation, provide that for you, and
12 you will see that it is still Indian land which
13 brings E.P.A. to enforce what we're telling you to
14 obey the command. Thank you.

15 MR. KLUESNER: Thank you. Thank
16 you all very much for coming. Thanks.

17 (The hearing concluded at 10:37
18 p.m.)

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24

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2 STATE OF NEW YORK

3 I, Howard Hubbard, do hereby certify that the foregoing
4 was reported by me, in the cause, at the time and place,
5 as stated in the caption hereto, at Page 1 hereof; that
6 the foregoing typewritten transcription consisting of
7 pages 1 through 140, is a true record of all proceedings
8 had at the hearing.

9 IN WITNESS WHEREOF, I have hereunto
10 subscribed my name, this the 29th day of November, 2012.

11 _____
12 Howard Hubbard, Reporter

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23
24

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