STATEMENT OF BASIS

RCRA CORRECTIVE ACTION PERMIT MODIFICATION I

E.I. du Pont de Nemours & Company, Incorporated
Pompton Lakes, New Jersey

EPA ID Number NJD002173946

I. INTRODUCTION

This Statement of Basis ("SB") outlines the United States Environmental Protection Agency's ("EPA") corrective action decisions related to this permit modification for the E.I. du Pont de Nemours & Company ("DuPont") Pompton Lakes Works ("PLW"), 2000 Cannonball Road, Pompton Lakes, Passaic County, New Jersey. EPA has consulted with the New Jersey Department of Environmental Protection ("NJDEP") and the United States Fish and Wildlife Service ("USFWS") in reaching these corrective action decisions.

DuPont (the "Permittee") is subject to the Corrective Action program under the Resource Conservation and Recovery Act ("RCRA"). The Corrective Action program is designed to ensure that facilities investigate and, if necessary, clean up any releases of hazardous wastes or hazardous constituents that may have occurred at their properties (including any releases that have migrated off-site). Pursuant to this program, DuPont has conducted numerous environmental investigations to characterize the nature and extent of contamination attributed to the DuPont facility and has implemented numerous interim corrective measures to address on-site and off-site contamination.

This SB includes an overview of corrective action efforts implemented at DuPont's facility and off-site, and explains why EPA is issuing a permit modification to impose the remedy to address contamination in the Pompton Lake Study Area ("PLSA"). The PLSA for purposes of this permit modification is defined as Pompton Lake (from the Lakeside Avenue Bridge to the Pompton Lake Dam including the Acid Brook Delta {"ABD"} as well as the ABD Upland Soil Areas). Additional requirements and details for this remediation will be included through approval of the Corrective Measures Implementation Work Plan ("CMI WP"), dated September 2011, which will be further revised in accordance with the provisions set forth in this permit modification and subject to EPA/NJDEP review and EPA approval.

This permit modification is limited to the PLSA. Remedy selection for the other areas of concern ("AOCs"), including the Ramapo River downstream of the Pompton Lake Dam, will occur in later permit modifications when investigations have been completed and remedies recommended by the Permittee are evaluated. Opportunities for public participation will continue to be provided through future informal meetings and public comment periods.

Information summarized in this SB is available in greater detail in the relevant documents identified herein and included in the Administrative Record for this facility. EPA encourages the public to review these documents in order to gain a more comprehensive understanding of environmental conditions at the DuPont PLW and the RCRA activities conducted to date. The documents are available for public review at the locations noted at the end of this SB. A list of acronyms used in this document is included at the end of the SB for ease of review by the reader.

II. PERMIT MODIFICATION – PUBLIC REVIEW PROCESS – INTER-AGENCY CONSULTATION – ADDITIONAL INFORMATION

On December 19, 2012 the EPA issued a Permit Modification I of the Hazardous and Solid Waste Amendments ("HSWA") Permit to DuPont for the PLW. The permit modification concerned remediation of the ABD sediments and the adjacent upland area of Pompton Lake as well as other requirements.

Before the permit modification became effective, DuPont and the Passaic River Coalition ("PRC") each timely filed petitions for its review with EPA's Environmental Appeals Board ("EAB") pursuant to 40 C.F.R. § 124.19 (a). By Order of the EAB, the appeals were stayed from February 2013 until April 2014 while EPA, DuPont and the PRC attempted to resolve the issues raised in the appeals. After consideration of all aspects of the matter involved in the permit appeals, pursuant to 40 C.F.R. §124.19(j), EPA withdrew the Permit Modification I in its entirety on April 30, 2014.

During and subsequent to the appeal period, DuPont performed additional work to supplement previous data collected with respect to the PLSA including the following:

- Bathymetry (or water-depth analysis) and side scan sonar surveys were performed in the PLSA. Thirty sediment samples were collected for grain size analysis to obtain river bed characterization data and updated bathymetry;

- 109 sediment cores were collected and 288 samples were analyzed for mercury outside the originally proposed 26-acre cleanup area in Pompton Lake in order to collect additional data and confirm conditions;

- Preliminary evaluations of river/lake bed stability and changes in sediment bed elevation patterns were conducted;

- DuPont also submitted and implemented scopes of work related to ecological investigations. These scopes of work range from collection and analysis of insects, fish and amphibian tissue to the sampling and analysis of sediment pore water, and

- 10 samples were collected in the uplands area within the Acid Brook Creek bed downstream of Lakeside Avenue to further characterize mercury in sediment and provide greater detail to aid in prospective future excavation efforts.

Public Review Process

EPA, pursuant to the procedures set forth in 40 C.F.R. Part 124, published a public notice of a new draft permit modification on November 2, 2014 and provided a public comment period from November 3, 2014 to February 2, 2015 for any interested parties to submit comments to EPA in writing and electronically. EPA held a Public Availability (Information Session) at the Carnevale Center, 10 Lenox Avenue in Pompton Lakes on November 12, 2014 at which EPA made a presentation and provided information on the proposed corrective actions. A public hearing was held during the public comment period on December 8, 2014 at the Carnevale Center in Pompton Lakes.

EPA followed procedures set forth in 40 C.F.R. Part 124 to solicit public comments prior to making its final corrective action and permit modification decision(s) for the PLSA. In making the decision(s), EPA evaluated and considered comments it received during the public comment period, including those it received electronically, at the public availability meeting and at the public hearing.

Inter – Agency Consultation/Draft Permit Modification

EPA also reviewed the development of the draft permit modification with the USFWS and the NJDEP before making its final permit modification decisions. In addition, DuPont in 2014, prior to the preparation of this permit modification, provided to EPA the results of the additional investigations referenced above including bathymetric and side scan sonar surveys, sediment sampling, evaluations of river/lake bed stability and changes in sediment bed elevation patterns, biota sampling and soil sampling.

This permit modification reflects EPA's interface with other regulatory and resource agencies, and evaluation of additional pertinent information received. The final permit modification includes the following:

- An ABD sediment removal program requiring dredging of sediment down to the peat layer in an area from the mouth of the Acid Brook to a line nearer to the Ramapo River channel, running approximately north-south. This area encompasses approximately 36 acres (See Figure 1).

- Removal of mercury impacted sediment that was identified and delineated outside the ABD between the Lakeside Avenue Bridge and the Pompton Lake Dam. Sediment characterization sampling, biota sampling and analysis, and bathymetry and side scan sonar data were utilized in a multiple lines-of-evidence approach. The result is that two specific areas were identified and delineated as also needing corrective action. One area is designated "Area A" and covers approximately 0.5 acres and the second area is designated the "Island Area" and covers approximately 2.5 acres. Both areas are depicted on Figure 1.

- Design and implementation of a Long-Term Monitoring Program ("LTMP") to establish baseline conditions and conduct long-term monitoring of the PLSA. The LTMP Work Plan ("LTMP WP") will be designed to measure key indicators of the overall condition of the PLSA over an initial five year monitoring period. The LTMP will be used to evaluate the PLSA ecosystem as a result of the removal of mercury impacted sediments in the near-shore environment as well as removal of the mercury impacted sediment in Area A and the Island Area with the greatest potential for methylation.

- Design and performance of an updated Ecological Risk Assessment ("ERA"), if determined to be needed. The performance of an ERA whether by DuPont or EPA, if done, will be based on the evaluation of the empirical data collected as part of the implementation of the LTMP as well as relevant historical data, and would utilize up-dated risk data, bioaccumulation factors, and relevant collected site-specific information.

- Design and implementation of a revised Upland Soil Areas Remediation and Restoration Plan which ensures the potential pathways for ecological receptors to mercury-contaminated soil are addressed.

The updated CMI WP required under this permit modification is due for submission for EPA/NJDEP review and EPA approval 90 days after the effective date of the permit. The updated CMI WP will contain information for performing the corrective action program described herein, including:

- operational procedures (i.e. dredging/removal procedures for sediment/soil);
- local, state or federal permitting requirements;
- health and safety protocols (i.e. updated Health and Safety Plan) addressing worker health and safety/perimeter air monitoring/traffic/noise and off-site disposal; and
- quality assurance/quality control procedures including clearly defined data quality objectives consistent with EPA quality management guidelines as part of its Quality Assurance Project Plan ("QAPP").

Additional Information

Shoreline Properties Investigation

Soil sampling within the floodplain was also conducted to determine whether historic flooding may have deposited sediment containing site-related metals onto the shoreline properties. A floodplain analysis was completed to identify the low-lying areas of the adjacent properties along the lake. Samples were then collected from properties along the western shoreline adjacent to Pompton Lake south of Lenox Avenue and north of the Pompton Lakes Dam, and analyzed for lead and mercury for characterization purposes. The results of the shoreline sampling indicated that the surface soil had not been impacted by ABD sediment during historic flooding events. The results of this investigation are presented in the Uplands Remedial Investigation Report ("RIR").

Pompton Lake Dam to Riverside Park Investigation

DuPont has performed a riverbed substrate mapping survey and sediment characterization sampling based on its Ramapo River/Pompton River Substrate Characterization Memorandum, DuPont Pompton Lakes Works dated February 2014, which was approved by EPA and NJDEP in July, 2014. The scope of work in the technical memorandum pertains to the Ramapo River and Pompton River from the Pompton Lake Dam approximately three miles downstream to Riverside Park in Wayne, New Jersey. The objective of the work is to determine how far downstream mercury might have migrated. DuPont will submit the analytical results of the above-described work to EPA and NJDEP for review. Any remedial action that may be proposed by EPA for this area will be subject to a separate permit modification, which will be subject to public review and comment.

III. FACILITY BACKGROUND

The DuPont PLW facility occupies approximately 570 acres of land, surrounded by mountainous areas to the north, Lake Inez (now drained) to the west and residential areas to the east and south. Two parallel valleys (Wanaque River and Acid Brook) run through the site north to south. Land use in the vicinity of the site is predominantly residential and commercial, but also includes undeveloped areas, an interstate highway (Route 287) and state-owned forest.

DuPont PLW conducted operations at the site from 1902 to April 1994, when the facility ceased its operations. Products manufactured included explosive powder (e.g., mercury fulminate and lead azide) and finished products (e.g., detonating fuses, electric blasting caps, metal wires, and aluminum and copper shells). The manufacturing operations and waste management practices resulted in contamination of the soil, sediment, and groundwater. The primary contaminants in the soil and sediments are lead and mercury. Groundwater contaminated with chlorinated

volatile organic compounds ("VOCs"), such as perchloroethylene ("PCE"), trichloroethylene ("TCE"), cis 1, 2-dichloroethylene, and vinyl chloride, has migrated off-site from the Eastern Valley part of the facility towards Pompton Lake.

Soil and sediment contamination occurred off-site along the Wanaque River, which flows through the Western Valley side of the facility. Operations in the Western Valley ceased in the mid -1920's and relocated to the Eastern Valley side of the plant. Due to releases of lead and mercury to Acid Brook, soil along Acid Brook was contaminated. Acid Brook flows from north to south through the Eastern Valley and discharges into the ABD of Pompton Lake have impacted sediments within the PLSA.

Between 1991 and 1997, Acid Brook was the subject of remedial efforts that included streambed remediation and excavation of floodplain soil. The cleanup at the PLSA is the focus of this permit modification.

IV. REGULATORY AND PERMIT FRAMEWORK

In 1988, DuPont entered into an Administrative Consent Order ("ACO") with the NJDEP. In 1992, EPA issued to DuPont a HSWA permit under RCRA. The NJDEP ACO and the EPA HSWA Permit required DuPont to conduct investigation and cleanup of contamination on and/or migrating from the site.

DuPont has announced that it will spin-off The Chemours Company as a separate and. independent company on July 1, 2015. In February 2015, DuPont created a wholly owned subsidiary company, Chemours FC LLC, which now owns the PLW. On July 1, 2015, Chemours FC LLC will become a subsidiary of The Chemours Company, when it is created. EPA is processing a request that the RCRA HSWA Permit, ID No. NJD002173946 for the PLW be transferred from DuPont to Chemours FC LLC to occur when Chemours is a separate company. This permit modification is a part of the RCRA HSWA Permit for the above-referenced facility. In addition, NJDEP has issued an amended ACO for the facility that includes Chemours as a party.

As a result of the RCRA Facility Assessment ("RFA") conducted in 1986 and subsequent investigations conducted under the permit and Order, 202 solid waste management units and/or areas of concern ("SWMUs/AOCs") were identified. The RIRs, each dated June 30, 2010 for the Northern Manufacturing Area, Western Manufacturing Area, and Eastern Manufacturing Area characterize conditions at the 202 SWMUs/AOCs on- and off-site. The off-site SWMUs/AOCs include: the Wanaque River, Acid Brook, the PLSA including the ABD, and the groundwater plume.

Other reports include the ABD RIR, dated December 19, 2008, the RIR for the Acid Brook Delta Uplands, dated June 30, 2010, Acid Brook Delta Area Remedial Action Selection Report ("RASR")/Corrective Measures Study ("CMS"), dated September 18, 2009, and the Acid Brook Delta Area Revised Corrective Measures Implementation Work Plan, dated September 2011.

The work performed and reported on regarding the ABD, above, was supplemented by additional investigations in the PLSA. The scope and results of those investigations which included sediment, biota, bathymetry as well as other studies are contained in the documents listed in Part VI, below.

The remainder of this SB concerns the selected remedies and the permit modification provisions for corrective actions for the PLSA.

V. POMPTON LAKE STUDY AREA

Pompton Lake is a 196-acre impoundment of the Ramapo River that was originally formed in 1858 when the Pompton Lake Dam was constructed by the U.S. Army Corps of Engineers at the southern end of the lake. The Ramapo River flows over the Pompton Lake Dam. Approximately 1.5 miles downstream, the Ramapo and Pequannock Rivers join to form the Pompton River. The Pompton River flows into the Passaic River, which empties into Newark Bay. The dam was enlarged in 1908. When the dam was enlarged, the area that is now the delta was submerged.

Current uses of the lake are restricted. Due to elevated levels of coliform and bacteria within the surface water, swimming and wading in the lake are prohibited. There is a state consumption advisory for fish due to mercury. The advisory also cites polychlorinated biphenyls, chlordane, dioxin, and DDX (DDT, DDE and DDD), which are from sources other than the DuPont PLW facility.

Restrictions on human use (e.g. recreational activities) can be enforced as they currently are; however, restrictions cannot be applied to ecological receptors. While the potential for unacceptable risks were shown to be minimal, ecological data for the delta contained in the ERA (2003) and the 2013 Pompton Lake Ecological Investigation Report indicated that the greatest exposure to mercury, particularly methyl mercury in abiotic and biotic media, is associated with near shore areas of the ABD. Mercury concentrations in some abiotic and biota media were higher in the PLSA than in the reference area.

The PLSA includes three general areas: (1) the portion in Pompton Lake (i.e., lake sediments) termed the delta; (2) the portion of Pompton Lake between Lakeside Avenue Bridge and Pompton Lake Dam that is outside the ABD: and (3) the uplands portion defined as the soils between Lakeside Avenue and the water's edge along the lake (including wetlands and wetland

transition areas) and called the "Upland Soil Areas". The ABD lake sediments include the portion of Pompton Lake south of the Lakeside Avenue Bridge, east of the discharge point of Acid Brook into Pompton Lake, and west of the centerline of the former Ramapo River channel.

Investigation data used for remedy evaluation and selection include: Technical Memorandum: Updated Conceptual Site Model, Pompton Lake Acid Brook Delta Area Project, DuPont Pompton Lakes Works dated March 2014 (i.e., Sediment Sampling Results), the Revised ABD RIR, dated June 19, 2008 and the Draft Remedial Action Plan, November 2006.)

VI. INVESTIGATIONS OF THE PLSA

Between 1995 and 2014, studies were conducted within the PLSA area, including multiple phases of ecological investigation, scientific studies, and remedial investigations. The major reports of the PLSA include the:

- RIR for the ABD, dated December 19, 2008;
- RIR for the Uplands, dated June 30, 2010;
- RASR/CMS, dated September 18, 2009;
- ABD Area Revised CMI WP, dated September 2011
- 2013 Sediment Sampling Plan, Pompton Lake Acid Brook Delta Area Project, DuPont Pompton Lakes Works dated July 2013;
- Technical Memorandum: Updated Conceptual Site Model, Pompton Lake Acid Brook Delta Area Project, DuPont Pompton Lakes Works dated March 2014 (i.e., Sediment Sampling Results);
- Technical Support for the Selection of Additional Sediment Removal Areas, Pompton Lake Corrective Action Implementation, Pompton Lakes, New Jersey dated October 2014; and,
- Technical Support for Acid Brook Delta Upland Soil Areas, Corrective Action Implementation, Pompton Lakes, New Jersey dated October 2014.

There are both human and ecological receptors in the PLSA. Humans may have direct contact with surface water and sediment during recreational activities although recreational activities on the lake are restricted due to elevated levels of coliform and bacteria within the surface water. Swimming and wading in the lake are prohibited. It is expected that current restricted use of the

lake will continue into the future. Ecological receptors, aquatic species in particular, have direct contact with surface water and sediment. Both humans and ecological receptors may have direct contact with surficial soil and, to a lesser extent, subsurface soil. Surface water flow (i.e., rainfall) may potentially transport soil containing constituents of concern ("COCs") in the ABD Upland Soil Areas to the lake. The focus on risk management for impacted sediment is the potential concern for ecological receptors.

Based on the PLSA investigations, three areas within Pompton Lake have been identified for corrective action.

A. ABD Sediments

The ABD area consists of lake sediment adjacent to the discharge of Acid Brook into Pompton Lake. The medium of concern in the ABD area is sediment.

The presence of site-related metals has been investigated as part of the ABD investigations including lead, mercury, copper, selenium, barium, and zinc. Barium, copper, selenium, and zinc concentrations are not considered to be detected at concentrations of concern. In areas where concentrations of lead are of concern, the lead-impacted area will be addressed by remediation of the co-located mercury-impacted area. The lead and mercury exhibit similar spatial distributions in that the highest concentrations of each are near the shore in the vicinity of the Acid Brook discharge. Mercury is the sole COC that methylates -- i.e., converts from the inorganic form to an organic compound through biological processing with certain bacteria to add a methyl-group-- and therefore, has the potential for bioaccumulation. Methyl mercury ("MeHg") was identified as a COC. Therefore, mercury is the constituent driving the remediation both, in areal extent and in depth, and is the primary COC. The highest mercury concentrations, greater than 100 milligrams per kilogram were generally found in the sediment near the Acid Brook discharge.

To summarize the results of the ABD sediment investigation:

- Sediment thickness ranges from 0 to 5.2 feet. Sediment thickness, although variable, is generally less than 2 feet. Sediment is often, but not always, underlain by peat. (The peat is the original ground surface prior to the construction of the dam. The underlying peat ranges in thickness from 0 to 4.3 feet with an average thickness of 1.9 feet.)

- Water depth ranges from less than 1 foot near the mouth of Acid Brook to more than 18 feet near the Pompton Lake Dam. In sediment, mercury concentrations along with other site-related metals generally decrease with distance from the mouth of Acid Brook.

- Surface water MeHg concentrations represent an integration of MeHg produced by the underlying sediment. The data shows that the near-shore sediment is the most likely site where mercury methylation could occur in the ABD area.

- In general, the distribution pattern of mercury in sediment overlying the peat is consistent with the physical parameters of the conceptual model -- i.e., the mercury concentrations decrease with distance from the discharge point of Acid Brook and increase with sediment depth.

B. Additional Areas in Pompton Lake

There are two additional areas of concern identified for removal that are outside of the ABD. Area A is comprised of approximately 0.5 acres. The Island Area is comprised of approximately 2.5 acres and includes the areas around the northern, southern and eastern borders of the island as well as the backwater areas to the west of the island. These areas are depicted on Figure 1.

Area A

The results of analytical sampling of sediments conducted in this area in 2007, 2010, and 2013 indicated elevated subsurface (i.e. in the sediments > 2.5 feet) concentrations of total mercury ("THg") relative to other areas of Pompton Lake outside of the ABD. In addition, the comparison of bed sediment elevations from bathymetric surveys conducted in 2007 and 2013 indicate the potential for a decrease in bed sediment elevation (i.e., an erosional area) in the vicinity of Area A during high flow events within the river system. The elevated subsurface THg concentrations in sediment and the potential for a decrease in bed sediment elevation in this area are important considerations in assessing additional sediment removal to reduce the potential for future exposure of subsurface materials that may contain elevated THg concentrations which could be in a near shore environment where methylation has the highest potential to occur.

Island Area

Data collected as part of the 2013 draft Ecological Investigation Report indicated that concentrations of MeHg in exposure media sampled adjacent to the Island Area were slightly elevated relative to other areas of Pompton Lake outside of the ABD. MeHg concentrations in sediment, pore water, larval and adult midge tissues, and spider tissues, were in the upper range of concentrations measured in Pompton Lake outside of the ABD. These findings indicate that the shallow, near-shore depositional sediments with increased sediment total organic carbon and acid volatile sulfide concentrations that surround the island may be favorable to mercury methylation. The reduction of MeHg concentrations in these matrices will reduce the potential

for MeHg exposure to upper trophic receptors (e.g., fish, birds, bats) that may forage in the vicinity of the island. Sediment removal to reduce THg concentrations in potentially favorable conditions for methylation will also reduce the overall area of ecological exposure to elevated mercury concentrations in sediment within Pompton Lake.

C. ABD Upland Soil Areas Remedial Investigation

The ABD Upland Soil Areas encompass approximately 1.74 acres south of Lakeside Avenue. Of those 1.74 acres, approximately 0.9 acres is a relatively flat area situated approximately 8 feet above the lake, 0.7 acres is a wooded slope, and 0.14 acres is relatively flat wetlands along the lake's shore.

Soil is the primary medium of concern for the ABD Upland Soil Area. A series of investigations were completed to delineate the presence of site related metals in the ABD upland soils. The results of the investigations are presented in the Pompton Lake Uplands RIR, dated June 30, 2010. Sampling results indicate that soils in the ABD uplands were delineated using the applicable 2009 NJDEP soil remediation standards. Barium, copper, lead, mercury, selenium, and zinc were identified as COCs for either human health and/or ecological receptors in some areas of the ABD Upland Soil Areas. Lead and mercury are the primary COCs with detected concentrations above the New Jersey Residential Direct Contact Soil Remediation Standards ("NJRDCSRS").

Based on investigation efforts, five areas (Areas A through E) were identified to require remediation and as such were included in the remedy selection process. In 2011, an additional area (F) was defined based on the presence of wetlands and wetland transition areas as part of remedy selection criteria. Existing samples collected in Area F (outside of areas previously identified for remediation) do not exceed NJRDCSRS, however additional samples will be necessary to evaluate conditions at post-remediation depths to address the potential for translocation of mercury via vegetative uptake. Figure 2 depicts the ABD Upland Soil Areas including those delineated as Areas A through F.

Existing soil analytical data was used to focus the delineation sampling in soil in the ABD Upland Soil Areas. Vertical delineation in surface soil (0 to 0.5 feet) outside the wetland/wetland transition zone was based on the lower value of NJDEP's November 2009 NJRDCSRS and ecological soil delineation criteria allowing for unrestricted use of the ABD Upland Soil Areas. The NJRDCSRS was used as the criteria for evaluating soil greater than 0.5 feet deep in the ABD Upland Soil Areas.

Areas landward within the wetland and wetland transition zone will be excavated to a depth of three feet below the final restoration elevation (as will be defined in the updated CMI WP

or one foot below the assumed water table elevation of 200.5 feet (i.e., 1 foot below full pool lake level), whichever is encountered first.

VII. REMEDIAL ACTION OBJECTIVES ("RAOs")

RAOs were developed to address potential unacceptable risks associated with site conditions and the exposure pathways identified. These are media-specific goals that are aimed at protecting human health and the environment. The RAOs were developed as long-term, media-specific goals and were used to assist in selecting a remedial alternative to address elevated mercury concentrations in sediment and various metals concentrations in the ABD Upland Soil Areas.

For the PLSA, both quantitative and qualitative RAOs were considered in analyzing ways to reduce potential exposure to COCs in soil and sediment.

ABD Sediments and Additional Areas in Pompton Lake

A. Qualitative RAOs for the ABD Sediment/Additional Areas in Pompton Lake

There are no promulgated applicable remediation standards for sediment to use as a quantitative RAO. However, RAOs can be narrative goals to which contaminated media (i.e. soil or sediment) must be treated, removed or otherwise cleaned in order to meet human health risk or environmental standards. As such, qualitative RAOs (narrative standards) were developed for the ABD sediments and the additional areas identified in Pompton Lake.

It is anticipated that the current use of the lake will continue in the future by both human and ecological receptors. Restrictions on human use can be enforced as they currently are; however, such restrictions cannot be applied to ecological receptors. While the potential for significant risks were shown to be minimal, the ecological data for the ABD sediments and the two additional areas in Pompton Lake indicated that mercury concentrations in some biota were higher in the ABD area than in reference areas.

Previous investigations concluded that most of the mercury in ABD sediment appears to be tightly bound to the fine-grained particles as indicated by toxicity characteristic leaching procedure data. However, biological processes in the upper few centimeters of sediment have the potential to mobilize some mercury in the form of MeHg, which then enters the food chain. Furthermore, the near-shore area within the ABD has higher dissolved mercury and MeHg surface water concentrations when compared to portions of the ABD further from the shore and the rest of Pompton Lake.

It should be noted that the RAOs for the ABD sediment and the two additional areas identified in Pompton Lake are driven by ecological risk and not human health risk. In order

to be protective of ecological receptors, the following qualitative RAOs for the ABD sediment and additional areas identified in Pompton Lake were developed:

- Remove sediments with the potential to methylate mercury and reduce the potential for further mercury methylation in near-shore sediment in the ABD;

- Reduce the area of exposure of ecological receptors to elevated mercury concentrations in sediment;

- Reduce the potential for ecological receptor exposure by removing sediment which has the potential to methylate mercury which reduces the mass of mercury in the surficial sediment (i.e. the sediment found at 0 to 0.5 feet) in the ABD and areas of concern identified in Pompton Lake (Area A and the Island Area); and,

- Reduce the potential for ecological receptor exposure by removing sediment which has the potential to methylate mercury which reduces the mercury mass in the deep sediment (i.e. the sediment found at > 0.5 feet) in the ABD and areas of concern identified in Pompton Lake (Area A and the Island Area).

The sediment removal within these identified areas of concern will focus on the mercury-impacted sediments including sediments down to the native cobble or gravel layer within the delineated areas. The updated CMI WP, including the Project Operations Plan, will incorporate procedures for implementing the work in the two identified areas of concern.

The following documents provide further information on the sediment delineation and studies supporting the lines of evidence for the RAO limit line:

- Draft Remedial Action Plan, November 2006;

- 2013 Sediment Sampling Plan, Pompton Lake Acid Brook Delta Area Project, DuPont Pompton Lakes Works dated July 2013;

- Technical Memorandum: Updated Conceptual Site Model, Pompton Lake Acid Brook Delta Area Project, DuPont Pompton Lakes Works dated March 2014 {i.e., Sediment Sampling Results}; and

- Technical Support for the Selection of Additional Sediment Removal Areas, Pompton Lake Corrective Action Implementation, Pompton Lakes, New Jersey dated October 2014.

ABD Upland Soil Areas

B. Quantitative RAOs for ABD Upland Soil Areas Outside of the Wetlands Transition Zone and Wetlands

Quantitative RAOs are typically defined as promulgated numerical criteria that have been developed to be protective of human health and/or ecological receptors for a particular medium (i.e., sediment, soil). The specific values used for humans may be different than those for ecological receptors because of the differences in toxicity and exposure between the two receptor groups and the medium type. As a result, the concentration of a particular constituent in sediment may be unacceptable for ecological receptors, but the same concentration in sediment may not result in a significant risk for humans.

For ABD Upland Soil Areas outside of the wetlands transition zone and wetlands, both human health and ecological criteria have been selected as the RAOs. The RAOs for surface soil (0 to 0.5 feet), are based on achieving the lower value of either NJRDCSRS or ecological soil delineation criteria. Using the lower value of the NJRDCSRS and ecological soil delineation criteria allows protection for use of the uplands by humans while also providing adequate protection for ecological receptors.

Analyte	Surface Soil Criteria (mg/kg)	Subsurface Soil Criteria (mg/kg)
Copper (Cu)	1,100*	3100**
Mercury (Hg)	20.5*	23**
Lead (Pb)	400**	400**
Zinc (Zn)	1,507*	23,000**

Notes: * represents ecological soil delineation criteria derived and presented in Appendix C of the ABD Uplands Report
** represents the NJRDCSRS

C. Qualitative RAO for ABD Upland Soil Areas within the Wetlands Transition Zone and Wetlands

The RAO for soils within the wetland and wetland transition zones (Removal Areas A, B, B1, C, D1, D2, and lower portions of E4, E5, E6, and F – Figure 2) will be:

- to eliminate or minimize the potential exposure to ecological receptors within the wetland and wetland transition zone to surface and subsurface soils in these areas

by limiting the potential for mercury methylation, bioaccumulation, and translocation.

To accomplish this RAO, areas landward of the ABD removal area within the wetland and wetland transition zone will be excavated to a depth of three feet below the final restoration elevation (as defined in the CMI WP) or one foot below the assumed water table elevation of 200.5 feet (i.e., 1 foot below full pool lake level), whichever is encountered first. The resulting excavation will be backfilled with certified clean fill material (base material and a planting medium) to establish a supportive medium of clean fill material at optimal surface elevations to provide a primary rooting zone for restoration plantings. The inclusion of additional excavation in the wetland/wetland transition zone (Area F) adds an additional measure to support ecological protectiveness of the aforementioned approach as it relates to restoration planting rooting depths and the potential for translocation of mercury remaining at depth following removal activities. By providing a clean layer for restoration planting to grow, it will minimize or eliminate the potential for ecological receptor exposure by limiting the potential for mercury methylation, bioaccumulation and/or translocation.

VIII. REMEDIAL ALTERNATIVES AND REMEDY SELECTION

A. Remedy Selection – ABD Sediments and Additional Areas in Pompton Lake

A detailed analysis was completed for five remedial alternatives to evaluate the general suitability of various remediation technologies to meet the established RAOs and specific objectives.

The following remedial action alternatives were evaluated as part of the RASR/CMS:

Alternative #1: No Action
Alternative #2: In-Situ Stabilization
Alternative #3: Capping
Alternative #4: Removal of sediment (shallow and deep) and soil (uplands)
Alternative #5: Removal of sediment (shallow) and soil (uplands) and Capping sediment area beyond 5 feet deep water)

Based on the screening evaluation of the five remedial alternatives listed above, Alternatives #4 and #5 were retained for further review.

The No Action remedial alternative was not retained for further analysis since the RAO specific objectives would not be met. The No Action alternative would not reduce concentrations or potential migration of mercury in the ABD.

In-situ stabilization was not retained for further analysis because a) implementation may take longer than other technologies being considered; b) the contaminants will potentially not be removed from the matrix; c) there are uncertainties regarding the re-establishment of benthic communities and other potential changes of the lake; and, d) there are uncertainties regarding impacts to groundwater recharge to or from the lake.

Capping was not a remedial alternative that, as a stand-alone technology, met the RAO specific objectives. This technology was not retained for further analysis because capping without excavation would reduce the storage capacity of Pompton Lake.

Subsequent to the completion of the RASR/CMS, the Permittee performed additional sediment and lake investigation fieldwork including bathymetry surveys and side scan sonar, sediment sampling and biota sampling as well as hydrodynamic modeling. The scope of work and results from these investigations are contained in the following documents submitted to EPA by the Permittee:

- 2013 Sediment Sampling Plan dated July 2013;
- Technical Memorandum: Updated Conceptual Site Model dated March 2014 – (i.e. Sediment Sampling Results);
- Technical Support for the Additional Sediment Removal Areas, Pompton Lake Corrective Action Implementation, Pompton Lakes, New Jersey dated October 2014; and
- Technical Support for Acid Brook Delta Upland Soil Areas Corrective Action Implementation, Pompton Lakes, New Jersey dated October 2014.

Based on the RASR/CMS and the aforementioned additional work performed since that time, EPA has selected Alternative #4: Removal of sediment (shallow and deep) and soil (uplands) because:

- There is removal of mercury impacted sediments which could methylate and the potential for mercury methylation in near-shore sediment is reduced.
- The area of exposure of ecological receptors to elevated mercury concentrations in sediment is reduced.
- The potential for contaminant mobility is significantly decreased.
- There are no concerns regarding cap stability during storm events.
- There is no need for a long-term cap monitoring program.

The ABD sediment removal area consists of approximately 36 acres depicted on Figure 1. The sediment removal, which will take place as part of the dredging operation, will focus on the mercury-impacted sediments and will include sediments shown on Figure 1.

There are two additional areas of concern identified for removal that are outside of the ABD. Area A is comprised of approximately 0.5 acres. The Island Area is comprised of approximately 2.5 acres and includes the areas around the northern, southern and eastern borders of the island as well as the backwater areas to the west of the island. These areas are depicted on Figure 1.

Selection of the two identified areas of concern in Pompton Lake was based on biotic (e.g. insect larvae) and abiotic samples (e.g. sediment pore water) which show that sediment in these areas has the potential to methylate in a near shore environment. The RAOs established for the ABD are applicable. The removal is intended to:

- Remove sediments with the potential to methylate mercury and reduce the potential for further mercury methylation in near-shore sediment in the ABD;

- Reduce the area of exposure of ecological receptors to elevated mercury concentrations in sediment;

- Reduce the potential for ecological receptor exposure by removing sediment which has the potential to methylate mercury which reduces the mass of mercury in the surficial sediment (i.e. the sediment found at 0 to 0.5 feet) in the ABD and areas of concern identified in Pompton Lake (Area A and the Island Area); and,

- Reduce the potential for ecological receptor exposure by removing sediment which has the potential to methylate mercury which reduces the mercury mass in the deep sediment (i.e. the sediment found at > 0.5 feet) in the ABD and areas of concern identified in Pompton Lake (Area A and the Island Area).

The sediment removal within these identified areas of concern will focus on the mercury-impacted sediments including sediments down to the native cobble or gravel layer within the delineated areas. The updated CMI WP, including the Project Operations Plan will incorporate procedures for implementing the work in the two identified areas of concern.

It should also be noted that NJDEP has a policy to reduce the mercury contamination under its New Jersey Mercury Reduction Action Plan (November 2009), which provides additional support for the Alternative #4.

Alternative #5 was also considered to be a viable remedial alternative for the ABD area. However, EPA prefers Alternative #4 because, although Alternative #5 is adequately protective as discussed in the RASR/CMS, it does not reduce the overall volume of contamination and is less durable over the long-term as compared to Alternative #4. Alternative #4 can be implemented with equipment that is readily available, removes

mercury impacted sediment from the ABD, and can be implemented in a reasonable amount of time.

A detailed description of the remedial alternatives and selection process is in Acid Brook Delta Area Remedial Action Selection Report/Corrective Measures Study, dated September 2009. The permit modification includes the following additional requirements.

ABD Upland Soil Areas

For surface and subsurface soils outside of the wetlands transition zone and wetlands (as depicted in Figure 2), the Permittee shall remove soil in accordance with Alternative #4 of the RASR/ CMS and the Technical Support for Acid Brook Delta Upland Soil Areas Corrective Action Implementation, Pompton Lakes, New Jersey dated October 2014 with the RAOs being the lower of the NJRDCSRS and the "ecological soil delineation criteria" developed in the RIR. (See Table in VII B., above);

For the Upland Soil Areas within the wetlands transition zone and the wetlands (as depicted in Figure 2), the Permittee shall remove soil in accordance with Alternative #4 of the RASR/CMS and the Technical Support for Acid Brook Delta Upland Soil Areas Corrective Action Implementation, Pompton Lakes, New Jersey dated October 2014.

The RAO for soils within the wetland and wetland transition zones (Removal Areas A, B, B1, C, D1, D2, and lower portions of E4, E5, E6, and F – Figure 2) will be:

- to eliminate or minimize the potential exposure to ecological receptors within the wetland and wetland transition zone to surface and subsurface soils in these areas by limiting the potential for mercury methylation, bioaccumulation, and translocation.

To accomplish this RAO, areas landward of the ABD Pompton Lake corrective action implementation boundary (ABD removal area) within the wetland and wetland transition zone will be excavated to a depth of three feet below the final restoration elevation (as defined in the CMI WP or one foot below the assumed water table elevation of 200.5 feet (i.e., 1 foot below full pool lake level), whichever is encountered first. The resulting excavation will be backfilled with certified clean fill material (base material and a planting medium) to establish a supportive medium of clean fill material at optimal surface elevations to provide a primary rooting zone for restoration plantings.

Long-Term Monitoring Program (LTMP) for PLSA

The Permittee will submit to EPA and NJDEP for review and EPA approval, a LTMP WP designed to establish baseline conditions and conduct long-term monitoring of the PLSA. The LTMP WP will be designed to measure key indicators of the overall condition of the PLSA over a five year monitoring period. The LTMP will be used to evaluate the PLSA ecosystem as a result of the removal of mercury sediments with the greatest potential for methylation. The results of the initial five year monitoring period will be utilized to determine the scope of further remedial action (if required) and/or any changes to the monitoring.

The LTMP WP will include establishment/documentation of baseline conditions. Historical data and sampling data collected from sediment and biota in 2013/2014 will be used to establish baseline conditions that will be documented in the LTMP WP. Sampling to address any identified data gaps in the establishment of baseline conditions will be proposed in the LTMP WP.

Existing data and any new data collected in order to address identified data gaps will be utilized to (1) develop baseline conditions of mercury in surface water so that significant increases in mercury exposure can be identified and, (2) develop baseline conditions of mercury bioaccumulation in fish tissue so that significant increases or decreases in mercury exposure to fish or piscivorous wildlife can be identified.

The LTMP WP will include clearly defined data quality objectives consistent with EPA quality management guidelines as part of its QAPP, a Health and Safety Plan ("HASP"), and a field sampling plan that, at a minimum, contains the following monitoring elements: surface water, sediment, sediment pore water, young of year fish tissue, adult fish tissue, larval insect tissue, emergent insect tissue. The conceptual framework and details for the study design/sampling approach, types of chemical analyses and biological samples, and frequency and location of samples will be provided in the LTMP WP.

Information and data gathered during the implementation of the LTMP WP are expected to be sufficient to allow EPA to determine if an ERA is necessary. During year five of the LTMP or, earlier if determined to be appropriate by EPA, EPA will determine the need to perform an ERA of the PLSA utilizing the data collected as part of the LTMP. The LTMP contains a significant portion of the ecological elements needed to perform the ERA. If determined to be required to further inform a decision about the possible need for additional remedial action, an ERA of the PLSA may be conducted.

Results of the LTMP and an ERA (if deemed necessary) will guide EPA on the subsequent monitoring and/or corrective action activities, should EPA determine them to be necessary.

B. Anticipated Post-Remediation Result – Sediment

The selected final remedy for the ABD sediment consists of: (1) dredging an approximately 36-acre area as depicted in Figure 1; (2) removal of sediment from the two additional areas totaling approximately 3 acres identified in Pompton Lake (Area A and the Island Area) as depicted, on Figure 1; and (3) performance of a five year LTMP.

Implementation of the final remedy is expected to remove sediments with the highest potential to produce methylated mercury which will reduce the potential for further mercury methylation in near-shore sediment and reduce the area of exposure of ecological receptors to elevated mercury concentrations in sediment.

C. Anticipated Post-Remediation Result – Soil

The design and implementation of the Remediation and Restoration Plan, subject to EPA approval, and consisting of a combination of remediation (including removal and engineering controls) and restoration at the ABD Upland Soil Areas, will ensure that the ecological exposure pathway will be adequately addressed.

IX. REMEDIAL APPROACH FOR THE PLSA IMPOSED BY THE PERMIT MODIFICATION

This permit modification imposes conditions which require the Permittee to implement dredging/removal of sediments in the ABD and the two additional areas identified in Pompton Lake (Area A and the Island Area) as well as to perform excavation/restoration of the ABD Upland Soil Areas and implementation of a LTMP. Additional operational details are included in the CMI WP submitted September 2011. The CMI WP will be updated as part of the requirements of this Permit Modification to address any changes necessary to implement the final remedies, including updates to the Project Operations Plan, HASP and QAPP.

EPA is also requiring the Permittee to identify in the CMI WP how the implementation of the selected remedy comports with Green Remediation practices and principles outlined in EPA Region 2's "Clean and Green Policy" as part of the up-date. The goal of the Region 2 Clean and Green Policy is to enhance the environmental benefits of federal cleanup programs by promoting technologies and practices that are sustainable. Additional information on the policy is available at the following website:

http://www.epa.gov/region02/superfund/green_remediation/policy.html

The operational details of the project to be determined include: procurement of federal, state and local permits, methods and location for treatment, locations for equipment mobilization,

sediment transport routes, and specific locations for temporary storage and stabilization areas.

The major components of the remedial approach in the CMI WP, as outlined in the September 2011 submittal which will be updated as necessary, are set out below:

A. Dredging Containment System

A containment system using rigid and/or flexible methods will be installed around the ABD area as an engineering control to protect the surrounding water from re-suspended sediment that may be generated during dredging activities. The chosen system will enclose the removal area and will be put in place prior to any removal activities. The ABD Upland Soil Areas will be isolated with control measures to reduce the potential for erosion or washout from disturbed areas to uncontained areas of the ABD or other areas within the uplands.

Note: It is expected that there will be a buffer zone of approximately 50 feet between the area for targeted sediment removal and the rigid containment system. The area to be dredged will extend as close to the rigid containment system as practicable.

B. Dredging and Excavation

ABD sediments will be dredged (in the wet) using hydraulic equipment. The sediment will be pumped or placed into small scows or other suitable containers on a barge for subsequent transport/re-handling. The removal area consists of the area from the discharge point of Acid Brook into Pompton Lake to approximately the Ramapo River channel. (See Figure 1, Permit Module Supplement.) Conventional excavation equipment will be used to excavate the ABD Uplands Soil Areas.

Confirmation of dredging completion will be conducted using both traditional and dredge mounted survey techniques. For the ABD Uplands Soil Areas, removal completion confirmation surveying will be used to verify that the horizontal and vertical limits of removal have been achieved.

C. Re-handling and Solidification

The dredged sediment will be moved to the shoreline. Sediment in the ABD area is a very soft, fine-grained material with very low strength. It is expected to require solidification prior to transport and disposal to meet disposal requirements. The upland soil is typical of conventional earthwork projects and may not require any solidification prior to disposal. It will likely be loaded directly into trucks for transport.

D. Sediment Transport

After all necessary treatment, the sediment and soil will be transported for disposal or re-use at an authorized off-site facility.

E. Restoration

Following dredging and removal, the ABD Uplands Soil Areas will be restored. The restoration plan will include re-grading of the uplands to accommodate planting with native vegetation, and placement of park amenities and pathways for public use. In the ABD, the dredged area will be restored by placing a granular layer of sand over the dredged area to manage any residual mercury contamination and to establish a zone for benthic community re-colonization over time. Additionally, planting and seeding of desirable aquatic native vegetation in the ABD area will take place. The plantings, along with the sand layer, will expedite restoration and increase the ecological functions of both the aquatic and benthic habitats.

F. Monitoring

Water column monitoring will be performed during the dredging and eco-layer placement activities within the ABD area to assess the potential impacts of the remedial activities (e.g., turbidity and mercury concentration). Air monitoring will be conducted during excavation, dredging, and material handling and processing activities. Monitoring will also be conducted for activities that may cause vibration (e.g., rigid barrier installation within the ABD area) at structures within a specified distance from the work area. The Permittee will also develop an appropriate post-remediation monitoring program as part of the CMI WP.

There is a river diversion along the Ramapo River (south of the Pompton Lake outlet), which is used by North Jersey District Water Supply Commission (NJDWSC) as one of the three intakes feeding the Wanaque Reservoir. It has a capacity of delivering up to 150 million gallon per day, on an "as needed basis," and which is ultimately treated before being transmitted to the municipalities as drinking water. Use of turbidity curtains and water column monitoring will ensure no adverse impact to the water used by the NJDWSC.

As part of the implementation of the corrective action, the Permittee will design and submit to EPA, for approval, a LTMP WP designed to establish baseline conditions and conduct long-term monitoring of the PLSA. The LTMP WP will be designed to measure key indicators of the overall condition of the PLSA over an initial five year monitoring period. The LTMP will be used to evaluate the PLSA ecosystem as a result of the removal of mercury sediments with the greatest potential for methylation. The results of the five year monitoring period will be utilized to determine the scope of further remedial action (if

required) and/or any changes to the monitoring.

X. RCRA CORRECTIVE ACTION CONCLUSIONS

The corrective action decisions by EPA contained in the Permit Modification I, including the dredging in the ABD, the dredging of those areas of concern identified in Pompton Lake between the Lakeside Avenue Bridge and the Pompton Lake Dam and the excavation of ABD Upland Soil Areas, are principally based on the ABD RASR/CMS dated September 2009, ABD Revised CMI WP dated September 2011, the Technical Memorandum: Updated Conceptual Site Model dated March 2014 and Technical Memo – Additional Sediment Removal Areas, Pompton Lake – Acid Brook Delta Project, Pompton Lakes, New Jersey dated October 2014; and, Technical Memo – ABD Upland Soil Areas Removal, Pompton Lake – Acid Brook Delta Project, Pompton Lakes, New Jersey dated October 2014.

The corrective action decisions in the final Permit Modification have been discussed in this SB. It is EPA's position that the corrective measure (or remedy) selection conforms to the requirements set forth at Permit Module VI.7 (a) and (b) for corrective measure selection. In addition, the CMI WP, which will be revised and submitted for EPA approval, is expected to conform to the requirements set forth at Permit Module VI.8.a for corrective measure implementation.

XI. FINANCIAL ASSURANCE

Pursuant to Module III, (p. III-38) of the RCRA permit for the facility, the Permittee must demonstrate within 30 days of the effective date of the permit modification, its financial assurance for completing the corrective action work contained in this modification.

XII. PUBLIC PARTICIPATION

EPA and NJDEP have participated in a wide range of community engagement activities in an effort to secure input from the community on the nature and scope of corrective action activities. From October 2010 to May 2012, EPA and NJDEP participated in the Pompton Lakes Community Advisory Group ("PLCAG"). At many of the PLCAG sessions EPA made presentations and responded to questions from the PLCAG members and the community.

EPA has continued to reach out to community groups and individuals in the Pompton Lakes community through the following engagement activities:

- participation in community meetings when requested to the extent practicable;
- outreach to local civic organizations including the Rotary Club, the League of Women Voters and members of the local real estate community;

- participation at the request of Pompton Lakes Borough Council to update the Council and the community at large via the Borough's local cable access channel regarding environmental cleanup activities;
- conducted Public Availability Sessions in October 2011, June 2013, November 2013, and March 2014;
- issued EPA newsletters in October 2012, April 2013, August 2013, February 2014, and September 2014;
- responding to individual comments or requests for information and,
- weekly attendance since November 2013 by EPA's Remedial Project Manager and Community Involvement Coordinator at the Pompton Lakes Municipal Building to be available to interested members of the community who have questions/concerns regarding the environmental clean-up activities at the DuPont PLW.

During implementation of the corrective measures contained in this Permit Modification, EPA will continue to conduct regular information sessions as a means of outreach in this community, and will also prepare newsletters on the remediation project.

EPA, NJDEP and the Permittee will continue to be responsive by conducting activities and developing communications tools to provide timely dissemination of information to the public and encourage ongoing, two-way communication between the Permittee and external stakeholders.

These activities will include: meetings, regular information sessions, outreach office, website presence, news releases, newsletters, and fact sheets.

This SB, final permit modification and Responsiveness Summary and other relevant documents can be reviewed at:

Pompton Lakes Public Library
333 Wanaque Avenue
Pompton Lakes, New Jersey
(973) 835-0482
http://www.pomptonlakeslibrary.org/libraryinfo.stm

The administrative record and all relevant documents pertaining to the facility may be reviewed Monday through Friday from 8 AM to 4 PM (except for federal holidays) at:

U.S. EPA
RCRA Records Center
290 Broadway, 15th Floor, Room 1538
New York, NY 10007-1866

(212) 637-3043

The permit modification and relevant documents are also available at:

EPA website:
http://www.epa.gov/region02/waste/dupont_pompton/index.html

and:

New Jersey Department of Environmental Protection website:
http://www.nj.gov/dep/srp/community/sites/dupont_pompton_lakes/more_site_info.htm
Mindy Mumford, Office of Community Relations, (609) 777-1976

For additional information about this permit modification and corrective action decision incorporated in it please contact Perry Katz, Project Manager, EPA New Jersey Remedial Action Branch, at (212) 637-4426 or email: katz.ira-perry@epa.gov.

Attachments to the SB:

1: List of Acronyms
2: Figure 1: Corrective Measures Implementation Areas
3: Figure 2: ABD Upland Soil Areas (Figure U-1 from Parsons Report)

STATEMENT OF BASIS

Hazardous and Solid Waste Amendments of 1984 (HSWA)
Permit Modification
E.I. du Pont de Nemours & Company, Incorporated (DuPont)
Pompton Lakes Works (PLW)
Pompton Lakes, New Jersey

LIST OF ACRONYMS
For Module III - Supplement, Statement of Basis and Responsiveness Summary

1. ABD – Acid Brook Delta
2. ACO – Administrative Consent Order
3. ATSDR – Agency for Toxic Substances and Disease Control
4. AOC – areas of concern
5. CAG – Community Advisory Group
6. CFR – Code of Federal Regulations
7. CMI WP – Corrective Measures Implementation Work Plan
8. CMS – Corrective Measures Study
9. COCs – contaminants of concern
10. Cu – copper
11. DuPont – E.I. du Pont de Nemours & Company
12. EAB – Environmental Appeals Board
13. EPA – Environmental Protection Agency
14. ERA – Ecological Risk Assessment
15. Hg -- mercury
16. HSWA - Hazardous and Solid Waste Amendments of 1984
17. LTMP -- Long-term Monitoring Program
18. MeHg – methyl mercury
19. NJDEP – New Jersey Department of Environmental Protection
20. NJDOH – New Jersey Department of Health
21. NJDWSC – North Jersey District Water Supply Commission
22. NJRDCSRS – New Jersey Residential Direct Contact Soil Residential Standards
23. Pb -- lead
24. PCE – perchloroethylene

LIST OF ACRONYMS (continued)
For Module III - Supplement, Statement of Basis and Responsiveness Summary

25. PLCAG – Pompton Lakes Community Advisory Group
26. PLREI – Pompton Lakes Residents for Environmental Integrity
27. PLSA – Pompton Lake Study Area
28. PLW – Pompton Lakes Works
29. PRC – Passaic River Coalition
30. QAPP – Quality Assurance Project Plan
31. RAO – remedial action objective
32. RASR – Remedial Action Selection Report
33. RCRA – Resource Conservation and Recovery Act
34. RFA – RCRA Facility Assessment
35. RIR – Remedial Investigation Report
36. SB -- Statement of Basis
37. SWMUs – solid waste management units
38. TCE – trichloroethylene
39. THg – total mercury
40. USFWS—United States Fish & Wildlife Service
41. VOCs – volatile organic compounds
42. WP – Work Plan
43. Zn -- zinc