



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS TEXAS 75202-2733

MEMORANDUM

SUBJECT: Request for Approval of a Consistency Exemption to the Statutory Two Million Dollar and Twelve Month Time Limits for the Conduct of a Non-Time Critical Removal Action at the Agriculture Street Landfill Site, New Orleans, Orleans Parish, Louisiana

FROM: Lon Biasco, On-Scene Coordinator
Response and Prevention Branch (6SF-RA)

THRU: Charles A. Gazda, Chief
Response and Prevention Branch (6SF-R)

TO: Myron O. Knudson, P.E., Director
Superfund Division (6SF)

I. PURPOSE

The purpose of this action memorandum is to request and document approval of a non-time-critical removal action and exemption to the statutory two million dollar and twelve month time limits imposed by Section 104(c)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9604(c)(1), for the Agriculture Street Landfill Site (the Site) located in New Orleans, Orleans Parish, Louisiana. The response actions proposed for this non-time-critical removal are supported by the Engineering Evaluation/Cost Analysis (EE/CA) for the Agriculture Street Landfill Site (Ecology and Environment, Inc., 1995).

The Agriculture Street Landfill Site (Site) is a former municipal waste landfill located on about 95 acres. In order to investigate and develop effective response alternatives for the Site, EPA divided it into five operable units (OUs):

- OU1 The undeveloped property (currently fenced);
- OU2 The residential developments consisting of Gordon Plaza Apartments, single family dwellings in Gordon Plaza subdivision, and the Press Court town homes;
- OU3 Press Park Community Center;
- OU4 Moton Elementary School which includes Mugrauer Playground and recreational center; and
- OU5 Groundwater.

The purpose of the response actions proposed in this Action Memorandum for Operable Units 1, 2, and 3 is to provide prompt risk reduction through expedited action. The proposed response actions, together with responses documented in the Record of Decision for Operable Units 4 and 5, may provide a comprehensive response to environmental contamination at the Agriculture Street Landfill Site. This Action Memorandum describes response actions to be implemented at the first three operable units: the undeveloped property (OU1), the residential properties (OU2), and the Press Park Community Center (OU3).

OU1, the 48-acre undeveloped property, will be cleared of vegetation, capped with 12 inches of soil, graded, and compacted. A layer of geotextile filter fabric will be placed on the subgrade to create a physical barrier between clean cover soils and contaminated subsoil.

In OU2, the residential properties, and OU3, the Press Park Community Center, the top 24 inches of existing soil/waste material will be excavated and transported off-site for disposal. Permeable geotextile filter fabric will be placed on the subgrade and covered with clean fill. Surface features will be replaced or returned as nearly as possible to "as was" condition.

The Record of Decision (ROD) which is the companion document to this Action Memorandum selects the no-action alternative for Moton School (OU4) and the groundwater operable unit (OU5). Investigations conducted by EPA subsequent to placing the Site on the National Priorities List (NPL) indicate that no response actions are required to ensure protection of human health and the environment at OUs 4 and 5.

In the Human Health Risk Assessment, found in the Remedial Removal Integrated Investigation (RRII) for the Site (EPA, March 1995), lead, arsenic, and polynuclear aromatic hydrocarbons (PAHs) were identified as contaminants of potential concern (COPCs) in soil. Lead, arsenic, and PAHs are hazardous substances as defined at Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and listed at 40 C.F.R. § 302.4. A removal action at the Site is authorized under CERCLA in order to abate a release or a potential release of the identified hazardous substance into the environment. Such a release could impact human health through inhalation, ingestion, or dermal contact.

The removal action for OUs 1, 2, and 3 recommended in this Action Memorandum will prevent direct and indirect contact, ingestion, and inhalation of soil and waste contaminated with COPCs by human and ecological receptors at concentrations that could pose unacceptable risks, and will prevent release of COPC-contaminated dust to the air at concentrations that could adversely affect human health and the environment. Moreover, the

proposed removal action will leave the Site in a condition which will permit future development. The recommended action meets the criteria for initiating a removal action under Section 300.415 of the National Contingency Plan (NCP), 40 CFR § 300.415.

The proposed removal actions are necessary to eliminate the exposure of residents to the COPCs as described above. The time required to complete the removal action is expected to exceed the statutory limit of twelve months. Cost of the proposed action is greater than the statutory limit of two million dollars. Approval of this document constitutes a determination that the removal action proposed herein is necessary, otherwise appropriate, and consistent with the remedial actions to be taken and grants consistency waivers (exemption) to the two million dollar and twelve month statutory limitations on removal actions.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID#: LAD981056997
Category of Removal: Non-Time-Critical
Site ID# D7
National Significance: NPL Site

A. Site Description

1. Removal site evaluation

Operations at the Agriculture Street Landfill (ASL) Site began in approximately 1909 and continued until the landfill was closed in the late 1950s. The landfill was reopened for approximately one year in 1965 for use as an open burning and disposal area for debris left in the wake of Hurricane Betsy. Records indicate that during its operation the landfill received municipal waste, ash from the city's incineration of municipal waste, and debris and ash from open burning. There is no evidence in any records that industrial or chemical wastes were ever transported to, or disposed of at, the site.

From the 1970s through the late 1980s, approximately 47 acres of the site were developed for private and public use that included private single-family homes, multiple-family private and public housing units, Press Park Community Center, a recreation center, retail businesses, the Moton Elementary School, and an electrical substation. The remaining 48 acres of the former landfill are currently undeveloped and covered with dense vegetation. Illegal dumping continues to occur on this portion of the site. Investigations at the Site have indicated the presence of hazardous substances, pollutants, or contaminants at concentrations above background and/or regulatory levels.

In 1986, EPA Region 6 conducted a Site Inspection and prepared a Hazard Ranking System (HRS) documentation record package utilizing the 1982 HRS model. The site score was not sufficient for the site to be considered for proposal and inclusion on the NPL. Pursuant to the requirements of Superfund Amendment and Reauthorization Act of 1986 (SARA), which amended the original Superfund legislation, EPA published a revised HRS model on December 14, 1990. At the request of area community leaders, EPA initiated an Expanded Site Inspection (ESI) in 1993 to support the preparation of an updated HRS documentation record package that would evaluate the site's risks using the revised HRS model. Subsequently, on August 23, 1994, the site was proposed for inclusion on the NPL as part of NPL update No. 17, and on December 16, 1994, EPA placed the site on the NPL.

Prior to 1994, access to OU1, the undeveloped portion of the former landfill, was unrestricted, allowing unauthorized waste disposal and exposure to COC such as lead, arsenic and carcinogenic polynuclear aromatic hydrocarbons (cPAHs) found in the surface and subsurface soils. In a time-critical removal action, initiated in March 1994, EPA installed an 8-foot-high, chain-link fence topped with barbed wire around the entire undeveloped portion of the former landfill. Concurrent with this action, EPA performed a Remedial/Removal Integrated Investigation (RRII) of the entire site. Based on information presented in the RRII report, EPA conducted a second time-critical removal action at the site in February 1995, and performed confirmational air and groundwater sampling. This removal action consisted of removing playground equipment from the Press Park Community Center. The equipment was located in a children's play area which exhibited surface soil lead contamination above 1,000 milligram/kilogram (mg/kg). The depression created by removal of the equipment was built up to grade with clean backfill, and the entire area was sodded with heavy grass to create a restrictive barrier and to limit contact with contaminated soils. In March of 1996, EPA completed a third time-critical removal action to repair the fence surrounding the undeveloped area.

The purpose of an EE/CA is to identify, evaluate, and provide a comparative analysis of removal alternatives. Pursuant to Section 300.415(b)(4)(i) of 40 C.F.R., an EE/CA must be performed at all sites for which non-time critical removal actions are proposed. In 1995, EPA Region 6 completed an Engineering Evaluation/Cost Analysis, which evaluated alternatives for responding to hazardous substances at the Site under a non-time critical removal action. For the purpose of the EE/CA the site was segmented into 5 operable units (OUs) as identified in Section I of this memorandum. This Action Memorandum addresses the response to be conducted at OU1, OU2, and OU3. OU4 and OU5 are being addressed under the remedial Record of Decision.

2. Physical location.

The Site is located approximately 2.5 to 3 miles north-northeast of the central business district of the City of New Orleans (Figure 1). The approximate geographic coordinates for the center of the former landfill are 29°59'20" north latitude and 90°02'31" west longitude. The Site is bound on the north by Higgins Boulevard, and on the south and west by the Southern Railroad rights-of-way. The eastern site boundary extends from the cul-de-sac at the southern end of Clouet Street, near the railroad tracks, to Higgins Boulevard between Press and Montegut streets. The site is partially redeveloped today.

3. Site characteristics.

Currently, the site is divided into two usage areas. Approximately 47 acres of the old landfill area is occupied by private residences, Housing Authority of New Orleans (HANO) housing, the Press Park Community Center, a small business complex, Gordon Plaza Apartments, Magrauer Playground, and the Moton Elementary School. The remaining portion, approximately one third of the former landfill area, is undeveloped and heavily overgrown with vegetation and trees. As noted above, access to this tract of property by the general public is now limited by a fence.

Records indicate that the landfill was operated by the City of New Orleans during its entire period of usage. Currently, various tracts within the undeveloped portion of the Site are owned by private individuals. The single-family dwellings are privately owned. The HANO housing and the Gordon Plaza Apartments are managed/owned by the City of New Orleans. The New Orleans School Board owns and manages the Moton Elementary School. Adjacent to the Moton Elementary School is a recreation area managed by the New Orleans Recreation Department (NORD).

This proposed action will be the fourth removal action conducted at the site and will be a non-time critical removal action.

4. Release or threatened release into the environment of a hazardous substance, or pollutant, or contaminant.

The Expanded Site Inspection (ESI) conducted by EPA in 1993, and the Remedial Removal Integrated Investigation (RRII) conducted by EPA in 1994, involved extensive sampling of environmental media at the Site. The following describes how each OU was sampled and a general description of those results.

Operable Unit 1, the undeveloped area adjacent to the residential area, was segmented into a grid with 52 surface soil samples collected from the nodes of the grid. Sampling analysis of OU1 indicated 47 of the samples had polynuclear aromatic hydrocarbons (PAHs), lead, and arsenic detected at concentrations above established Risk Based Concentrations (RBCs). RBCs are guidelines used by EPA Region 6 based on an excess risk from cancer for 1 out of 1 million individuals.

In a similar fashion, OU2 was segmented by a grid with nodes every 200 feet and a total of 52 samples collected on the nodes. Soils surrounding 33 homes were also sampled; samples were collected from the front and back yards and along drip lines. Lead and arsenic was detected above RBCs in these areas as well. At Operable Unit 3, samples collected in 5 locations showed analytical results similar to those found in OU2.

Analytical results of surface soil samples taken in specific OUs of the ASL area are discussed below. Inorganic analyses of surface soil samples collected during the ESI showed arsenic and lead to be present at concentrations greater than 3 times the average background concentration and these metals were the primary contaminants of concern for inorganics.

OU1 results: Arsenic concentrations ranged from 1.7 to 70.7 ppm. Lead concentrations ranged from 37.6 to 28,300 ppm.

OU2 results: Arsenic concentrations ranged from 2.38 to 62.3 ppm. Lead concentrations ranged from 12 to 2,860 ppm.

OU3 results: Arsenic concentrations ranged from 5.95 to 37.1 ppm. Lead concentrations ranged from 92.7 to 3,090 ppm.

Lead and arsenic are hazardous substances as defined at CERCLA Section 101(14), 42 U.S.C. § 9601(14), and listed at 40 C.F.R. § 302.4.

Organic sample analyses showed PAHs at concentrations greater than or equal to 3 times the average background for all three OUs. Previous analytical reports (EPA SI report and other independent reports) have repeatedly shown the presence of PAHs which have been linked to historical landfill activities such as incineration of wood and other debris. PAHs also are hazardous substances as defined at CERCLA Section 101(14), 42 U.S.C. § 9601(14), and listed at 40 C.F.R. § 302.4.

Based on analytical data collected to date, lead appears in high concentrations in the surface soils of ASL. As stated in OSWER Directive #9355.4-02 entitled "Interim Guidance on Establishing Soil Lead Cleanup Levels at Superfund Sites," it is

EPA policy to limit and/or restrict public access in residential areas to surface soils with lead concentrations greater than 500-1,000 ppm. Although the undeveloped area (OU1) is zoned as light industrial, it is surrounded by residential areas, an elementary school, and a city recreation facility. Access to the undeveloped area originally was not limited or restricted in any fashion, and there was evidence that it was frequently accessed by humans, particularly children. Therefore, contact with surface soils of the undeveloped area was the major route of exposure. Access to OUs 2 and 3 is not now and has not recently been restricted or limited. In these areas, contaminated soil continues to be a potential route of exposure through dermal contact and inhalation or ingestion of soils and dust.

5. NPL status

The Agriculture Street Landfill Site is on the National Priorities List (NPL).

6. Maps, pictures and other graphic representations

Attachment 1 - site area map
Attachment 2 - site map
Attachment 3 - Action Memo 1
Attachment 4 - Action Memo 2
Attachment 5 - Action Memo 3
Attachment 6 - Confidential Enforcement Attachment

B. Other Actions to Date

1. Previous actions

As noted above, in September 1993, EPA initiated an Expanded Site Inspection (ESI) of the Site. Information from the ESI was used in preparing a Hazard Ranking System evaluation of the Site. On August 23, 1994, the Site was proposed for inclusion on the NPL in a Notice of Proposed Rulemaking. On December 16, 1994, the Site was placed on the NPL.

Prior to 1994, access to OU1, the undeveloped portion of the former landfill, was unrestricted, allowing unauthorized waste disposal and exposure to contaminants of potential concern such as lead, arsenic, and polynuclear aromatic hydrocarbons found in the surface and subsurface soils. To mitigate exposure to Site contaminants EPA has previously conducted three time-critical removal actions. These previous time-critical removal actions have been previously described in Section II site removal evaluation (see Attachments 3,4,5).

Concurrent with the initial removal action to install the fence around OU1, in EPA performed a Remedial/Removal Integrated

Investigation (RRII) for the entire site. RRII field work was conducted from April 4 through June 20, 1994. Samples of surface and subsurface soil, sediment, surface water, groundwater, air, dust, tap water, garden produce, and paint chips collected during the field investigation were submitted to specialized laboratories for analysis. Aerial photographs, geophysical investigations, and computer modeling were also used to supplement analytical data to define the site boundaries and evaluate migration pathways. The data were also used to prepare the Human Health Risk Assessment (HHRA) and Ecological Risk Assessment (ERA), which are presented in the RRII report.

Based on the results of the RRII, EPA determined that a non-time critical removal action was warranted and subsequently initiated the EE/CA.

2. Current actions.

EPA's most recent actions at the Site have been those actions necessary to satisfy the public participation requirements for remedy selection provided in Section 117 of CERCLA, 42 U.S.C. Section 9617, and NCP requirements for community relations found at 40 C.F.R. Sections 300.415(n) and 300.430(c) for removal and remedial actions, respectively. EPA released a Proposed Plan of Action for public comment in February 1997. The comment period began on March 5, 1997 and was initially scheduled to end on April 12, 1997. Upon receipt of a request for extension, EPA extended the public comment period for an additional thirty days, until May 12, 1997.

Site documents were made available to the public in the Administrative Record and remain at EPA's outreach office at 3221 Press Street at the Site, as well as at the offices of EPA Region 6 and LDEQ. Two public meetings were held on March 19, 1997; a morning meeting at the Gordon Plaza Apartments to accommodate the elderly persons residing there, and an evening meeting at the Press Park Community Center to receive comments from other site residents and the general public. Transcripts of the March 19, 1997 public meetings are included in the Administrative Record.

Comments from the public revealed community objection to leaving the undeveloped property (OU1) fenced without further response action. This concern was confirmed in subsequent discussions between EPA and involved citizens. Though alternatives for OU1 were initially presented to the community for comment in April 1996, through a draft Proposed Plan Fact Sheet and EE/CA, and again during a formal comment period from March 5 through May 12, 1997, EPA provided another opportunity to submit any remaining comments in an additional 30-day informal comment period which started July 7, 1997 and concluded August 5, 1997. Responses to comments received during both the formal and

informal comment periods are contained in the Responsiveness Summary which is included in the Administrative Record.

The community, generally, appears to be divided in its comments on EPA's proposed actions at the Site. A number of commenters who are residents stated that they want to have the Site cleaned up and redeveloped, so that they may stay in their existing neighborhood and have the integrity of the community maintained. A number of other commenters who are residents stated a strong preference for federally-funded, permanent relocation. Community response was also divided on disposition of the OUI undeveloped property. Initially, most of the commenters on OUI advocated that some response action be taken contemporaneous with response actions at the remainder of the Site. However, some of the comments received during the latest, informal comment period advocate no action at OUI.

3. The reason for the proposed actions and exemptions to the two million dollar limit and one year time requirements.

EPA has conducted three previous time-critical removal actions at this Site to prevent human contact with Site contaminants at specific portions of the Site.

The proposed non-time-critical removal action will prevent direct human contact with contaminated surface and subsurface soils in OUs 1-3 of the Site, by placing a geotextile fabric and clean fill barrier between subsurface contaminants and human or ecological receptors at the surface. The geotextile fabric will also serve as a marker identifying subsurface contaminants to persons who engage in excavation for utility repairs, construction work, or other activities.

Alternatives to the proposed action were based on site findings described in the Remedial Removal Integrated Investigation Report and a Supplemental Sampling Investigation Report completed in 1995, and further examined in the EE/CA. The proposed non-time-critical removal action is in the nature of a source control action which will eliminate the risk of potential exposure to hazardous substances at the Site within a matter of months. The action to be conducted to respond to present Site conditions is appropriate as a non-time-critical removal action. The proposed source control measures are also consistent with any remedial action alternative, if further action at the site should become necessary.

The consistency waiver is an exemption to the statutory limits of two million dollars in expenditures and twelve months in time for removal actions conducted with Hazardous Substances Trust Funds. The exemption is only granted in circumstances

where the proposed removal action is entirely consistent with the ultimate site remedy.

EPA has conducted removal and remedial actions at a number of landfill sites across the country. As a rule, because of the large volume and heterogeneous nature of landfill wastes, EPA has found that treatment and/or removal of contaminants is frequently impractical, and that containment of such contaminants effectively eliminates any risk they may pose.

As stated above, the Agriculture Street Landfill was operated as a municipal landfill. Extensive investigative efforts conducted by EPA found no evidence that industrial waste was ever contributed to the Site. Contaminants found at this Site are consistent with reported past practices of open burning and landfilling of incinerator ash as well as municipal waste.

The contaminants of concern in soils identified for this Site are consistent with those typically identified in soils at municipal landfills. While concentrations of contaminants in surface soils vary widely across the three operable units in question, the concentration levels are consistent with those found in municipal landfill Superfund sites. The removal action selected for this Site, containment of subsurface contaminants using a sub-grade geotextile barrier, and creation of a clean fill barrier above the geotextil between surface receptors and subsurface contaminants, is also consistent with the presumptive remedies for landfill sites. The consistency waiver is appropriate in this case.

The authority to grant the so-called consistency waiver for removal actions at sites placed on the National Priorities List (NPL) was delegated to the Administrator of the United States Environmental Protection Agency (EPA) by Executive Order Number 12580, January 23, 1987, 52 Fed. Reg. 2923 and redelegated to the Regional Administrator, EPA Region 6, by EPA Delegation Numbers 14-2-B (April 15, 1994) and 14-3 (September 13, 1987). The authority was further redelegated to the Director of the Superfund Division by Region 6 Delegations Numbers R6-14-2-B (October 8, 1996) and R6-14-3 (August 4, 1995).

C. State and Local Authorities' Roles:

1. State and local actions to date

The Louisiana Department of Health and Hospitals conducted a city-wide blood lead study, which included the northeastern section of the city in which the Agriculture Street Landfill was located.

As discussed above, EPA initially conducted a Site Inspection in 1986, due to the Louisiana Department of Health and Human Resources' concern for potential health impacts in the residential developments surrounding the Moton School. The Site was subsequently referred to the Louisiana Department of Environmental Quality for further consideration.

2. Potential for continued State/local response

City of New Orleans officials have repeatedly asserted that due to the financial condition of the City, it will be unable to fund any response activities. The City may have the capacity to provide in-kind services related to the proposed removal actions. In-kind services sought by EPA may include: operation and maintenance of the remedy, security services coordinated through the New Orleans Police Department, use of public facilities for community meetings related to removal efforts, and traffic control during the action.

The Louisiana Department of Environmental Quality provides technical assistance to EPA for this Site through a State Cooperative Agreement. The Louisiana Department of Health is working with EPA and ATSDR on health-related issues.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT; STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

Exposure to Human Populations, Animals or the Food Chain. 40 C.F.R. § 300.415(b)(2)(i); .

High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate. 40 C.F.R. § 300.415(b)(2)(iv).

In accordance with Section 300.415(b)(2)(i) of the National Contingency Plan (NCP), 40 CFR § 300.415(b)(2)(i) and Section 300.415(b)(2)(iv) of the NCP, 40 CFR § 300.415(b)(2)(iv), EPA has determined that there exists the potential for exposure of human populations, animals, or the food chain to hazardous substances including lead, arsenic, and PAHs. Moreover, as discussed above, EPA investigations have detected levels greater than background of lead, arsenic, and PAHs in soils at or near the surface, that may migrate.

Lead, arsenic, and PAHs constitute hazardous substances as defined at Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), and further listed at 40 C.F.R. § 302.4. Additional information regarding the toxicological effects of these substances are

contained in the Site Administrative Record in the form of abstracts provided by the U.S. Department of Health and Human Services and the Agency for Toxic Substance and Disease Registry. Health effects are also well-documented in general toxicological literature.

According to the U.S. Department of Health and Human Services (HHS) and the Agency for Toxic Substance and Disease Registry (ATSDR), the following health effects are associated with exposure to lead:

Exposure to lead is particularly dangerous to unborn and young children. Lead can affect virtually every system in the body and is particularly harmful to the developing brain and nervous system of fetuses and young children. Unborn children can be exposed to lead through their mothers' circulatory systems, which exposure may cause premature births, smaller babies, and decreased mental ability in the infant. Severe lead exposures in children can cause coma, convulsions, and even death. Lower levels of lead exposure can cause adverse effects on the central nervous system, kidney, and hematopoietic system. Blood lead levels as low as 10 milligrams per deciliter (ug/dL), which would not cause distinctive symptoms, are associated with decreased intelligence and impaired neurobehavioral development. Many other effects begin at low levels including decreased stature or growth, decreased hearing acuity, and decreased ability to maintain a steady posture.

In adults, lead exposure may decrease reaction time and possibly affect the memory. Lead exposure may also cause weakness in fingers, wrists, or ankles. Finally, lead exposure may cause high blood pressure, anemia, brain and kidney damage, abortions, and damage to the male reproductive system.

Arsenic and arsenic compounds are considered skin and lung carcinogens in humans. Ingestion of arsenic could also cause irritation of stomach and intestines, nerve injury, and possible liver damage.

According to ATSDR, PAHs are suspected carcinogens. Based on limited studies, certain forms of PAHs are anticipated to cause cancer if swallowed or inhaled, and other potential harmful effects may occur to newborns if the mother is exposed during pregnancy.

IV. ENDANGERMENT DETERMINATION

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

V. EXEMPTION FROM STATUTORY LIMITS

The proposed response actions are appropriate and consistent with any remedial action to be taken. The proposed removal actions are also appropriate because they will quickly prevent direct human contact with any contaminated surface soils in OU 1-3 of the Site, as well as control the sources of contamination by containment of contaminants in the subsurface, achieving expeditious elimination of actual or potential site risks. Source control measures such as those proposed are consistent with any conceivable remedial action. This proposed removal action therefore warrants exemption from the \$2 million and twelve month statutory limitations on removal actions. Approval of this action will invoke the consistency waiver (exemption) to the statute.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The proposed response will consist of providing a permanent barrier to prevent further actual or potential exposure of residents to the contaminants of concern at the Site, as described for OUs 1, 2, and 3 in the EE/CA, which may be reviewed in the Administrative Record. The purpose of the EE/CA was to investigate alternatives and determine which alternative best met the proposed removal action objectives. These removal objectives for the Site were identified as follows:

Prevent direct and indirect contact, ingestion, and inhalation of soil and wastes contaminated with COPCs by human and ecological receptors that could pose unacceptable risks;

Prevent the release of COPC-contaminated dust to the air at concentrations that could adversely affect human health and the environment; and

Leave the site in a condition that would permit future beneficial use.

The EE/CA evaluated several alternatives: from no action to permanent relocation. The alternatives were evaluated against the criteria developed to meet CERCLA statutory requirements.

The following describes EPA's expectation for project methods, based on experience with other similar projects. EPA expects to deploy the U.S. Army Corps of Engineers (COE) to conduct field action for the proposed response. EPA has historically used the COE due to their extensive construction

experience at similar sites. The response action for each operable unit is based on the current and near future use for that specific OU and the current characteristics of that OU. To initiate actions in specific operable units, right of entry access from the owners and residents must be obtained in the form of a consensual access agreement. As with the response selection, the access agreements will be tailored to the specific OU. OU2 access agreements will be accompanied by a resident handbook explaining the operations to be conducted by EPA and decisions which must be made by the owners. All materials removed from the ASL, such as soil, construction debris, vegetation, utility lines, garbage, etc. will be transported away from the Site according to applicable requirements and disposed of in an appropriate type offsite landfill.

OU1, the 48 acre undeveloped area, is currently fenced from earlier EPA removal actions and is heavily overgrown with vegetation characteristic of a sub-tropical jungle. Based on the location and dense vegetation, existing raptor population, and visible evidence, EPA is expecting a significant rodent population to be infesting the OU. Rodent control will be conducted in a manner to discourage vermin from migrating into residential areas. To minimize rodent flight into the residential areas during remediation construction activities, an extensive initial and ongoing rodent control effort will occur. The effort may consist of addition of barriers along the fence line, heavy initial trapping of rodents, brush cutting from the fence line back to force rodents away from the residential area, and use of rodenticides that are unlikely to impact other wildlife, such as birds. The vegetation in the OU will then be minimized. The largest trees are expected to remain; however, some of the large trees may be removed to provide better sunlight penetration to support grass growth. Weed stalks, small trees, and branches may be mulched and used as compost during completion of capping activities in OU1. Vegetation not appropriate for compost material or impractical to remain in the OU will be properly disposed in an appropriate off-site landfill. The OU will then be graded to control run-off from the site; thereby, minimizing storm water impact on the residential areas. OU1 will then be covered with a permanent permeable geotextile membrane which will serve as a demarcation barrier and prevent large landfill material from migrating to the surface. The placement of the geotextile membrane will serve as an indicator in the event that future excavation occurs. The geotextile membrane will enable any such future excavation actions to take appropriate measures with subsurface soils beneath the membrane which may be contaminated. One foot of soil, (six inches of common fill and six inches of top soil) will be placed on the OU to act as barrier from future contact. Care will be taken in grading the cap to minimize run-off from impacting the residential areas of ASL. The cap will have seed and mulch added and will be watered to re-establish a vegetative cover. All fencing around OU1 will

be removed at the completion of the action. A portion of OU1 will likely be utilized as a staging area with small stockpiles of clean earth, excavated soil, and supplies will be temporarily stored in this area to support ongoing construction efforts in OU 1,2,3.

OU2 consists of all the residential areas in ASL. All homes, town homes, apartments, and the small commercial area will be thoroughly documented and certain engineering measurements taken prior to any soil excavation. The documentation process will entail photographing, video taping, and written descriptions of all details of the house/ apartment/ building. Details established and documented will include at a minimum: elevation of foundations, working condition of utilities, shrubbery and landscaping details, outside conditions of walls, structural condition of inside walls, location and condition of sidewalks and driveways, together with any unique items such as gardens or tools/lawn sheds or any other details necessary to return the residence to "as was" condition. Documentation needs and access contingencies will be provided to the resident in a resident handbook package which will discuss the scope of the removal action, landscape restoration alternatives, the policy for long term and short term maintenance of vegetation, other pertinent information, and a dispute resolution process should any disputes arise.

Upon completion of documentation, two feet of soil will be excavated from all areas where contact may occur. Concrete areas, such as, driveways and sidewalks may be removed and replaced at the discretion of the OSC/RPM if it is determined to be cost effective. Due to labor costs, detailed work around concrete is extremely costly compared to replacement cost; therefore, significant areas of concrete are likely to be removed to expedite the removal action. Similarly, utility lines may be removed and temporarily relocated during excavation activities. The utilities will be properly replaced in accordance to city codes prior to backfilling. Care will be taken to minimize utility down time during transfer to temporary utility lines. Temporary sidewalks will be installed to allow continued access to residences, thus eliminating the need for temporary relocation of residents during the action. A permeable geotextile liner will be placed in the excavated areas for the reasons explained in the proposed actions under OU1. The yards will then be backfilled and returned to "as was" condition. This may entail replacing concrete, landscaping to original condition, and restoring fences and other items such as garden sheds. Large trees will be replaced with the best similar variety which is practical and commercially available. The lawns and plants will be watered by EPA/COE to ensure proper establishment of vegetation. A final walk through with the owner or resident will be offered to ensure proper restoration has occurred and the resident/owner satisfaction.

OU3 consists of the Press Park Community Center. The community center is considered a "social activity hub" which anchors the community. The community center sponsors many activities such as holiday festivities, family events, wedding receptions, and religious ceremonies. To prevent an inconvenience to the community, an alternate location will be sought to temporarily hold these events during removal actions. OU3 will be documented as described in OU2. The site will be excavated to 2 feet, a geotextile membrane will be placed, and then backfilled. The area will be returned to "as was" condition as described in OU2, e.g., concrete, landscaping, and utilities will be replaced. Playground equipment removed in a previous removal action to eliminate exposure of children to contaminated soil will be replaced in this action.

2. Contribution to remedial performance

The selected response is consistent with the presumptive remedy for CERCLA Municipal Landfill Sites (OSWER Directive No. 9355.0-49FS), which establishes containment as an element of the presumptive remedy for municipal landfill sites. The selected response contributes to any additional conceivable future remedial action by preventing direct human contact with the contaminated soil. This will eliminate the direct contact pathway to hazardous substances found in the Site surface and subsurface soils.

3. Description of alternative technologies

The proposed technology eliminates human contact with surface soils at the Site efficiently and effectively. The technology was selected after careful study (see EE/CA) of other possible alternatives.

4. Applicable or relevant and appropriate requirements (ARAR's)

The proposed removal action will be conducted to eliminate the actual or potential release of a hazardous substance, pollutant or contaminant pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq., and in a manner consistent with the National Contingency Plan, 40 C.F.R. Part 300, as required at 33 U.S.C. § 1321(c)(2) and 42 U.S.C. § 9605. As per 40 C.F.R. § 300.415(i), fund-financed removal actions under CERCLA Section 104, 42 U.S.C. § 9604, and removal actions pursuant to CERCLA Section 106, 42 U.S.C. Section 9606, shall, to the extent practicable considering the exigencies of the situation, attain the applicable or relevant and appropriate requirements under Federal environmental law, including, but not limited to, the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2601 et seq., the Safe Drinking Water Act (SDWA), 42 U.S.C. Section 300

et seq., the Clean Air act (CAA), 42 U.S.C. Section 7401 et seq., the Clean Water Act (CWA), 33 U.S.C. Section 1251 et seq., the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6901 et seq., or any promulgated standard, applicable or relevant and appropriate requirements, criteria, or limitations under a State environmental or facility siting law that is more stringent than any Federal standard, requirements, criteria, or limitation contained in a program approved, authorized or delegated by the Administrator and identified to the President by the State.

For large-scale soil operations undertaken at the Site during the removal action, state regulations for the containment and control of stormwater run-off and air regulations for fugitive dust emissions apply. These include LAC 33:IX.3 for the stormwater runoff requirements and LAC 33:III.7 for dust control.

In addition, EPA Region 6 Risk Based Concentrations (RBCs) were identified as requirements to be considered (TBCs). RBCs are not regulations or guidance; they are concentrations of chemicals in soil that correspond to an estimated excess cancer risk of 1×10^{-6} (one in a million) for an age-integrated residential receptor (i.e., exposure during childhood and adult years combined) using standard exposure assumptions, and are intended to serve as a screening mechanism for contaminants of potential concern at a site.

5. Project Schedule

The duration of project activities is expected to be approximately twelve to eighteen months. Favorable weather may improve scheduling. Initial activities will be community meetings to inform residents of the scope of the removal, discuss access issues, and identify project contacts. These activities are expected to occur in the fall. The next phase will involve securing access, controlling rodents in connection with OU1, and initiating field activities in OU3. Field activities are expected to begin in OUs 1 and 2 in January 1998. The entire removal is expected to conclude within 12 to 18 months.

B. Estimated Costs

Previous Removal Action Ceilings

Removal Action #1.....	\$510,000
Removal Action #2.....	\$ 40,900
Removal Action #3.....	\$ 14,500
Total Previous Removal Actions.....	\$566,400

Extramural Costs

COE \$17,910,000
Extramural Costs Contingency (approx =10%)..... \$ 1,790,000
TOTAL, EXTRAMURAL COST.....\$19,700,000

Intramural Costs

Direct Cost..... \$ 100,000
Indirect Costs \$ 200,000
TOTAL, INTRAMURAL COSTS \$ 300,000
TOTAL, REMOVAL PROJECT CEILING..... \$20,000,000

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Should the action described in this action memorandum be delayed or not taken, the potential exposure of nearby human populations to hazardous substances found in the surface and near surface soil of OU1, OU2, and OU3 of the landfill will remain unabated.

VIII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this site.

IX. ENFORCEMENT

See confidential Enforcement Attachment.

X. RECOMMENDATION

This decision document represents the selected removal action for the Agriculture Street Landfill Site in New Orleans, Orleans Parish, Louisiana, developed in accordance with CERCLA, as amended, and not inconsistent with the NCP. This decision is based on the administrative record for the site.

Conditions at the site meet the criteria found at NCP Section 300.415(b)(2) of the NCP, 40 C.F.R. § 300.415(b)(2), for

a removal action, as well as the criteria for an exemption of the time and dollar limits imposed by CERCLA Section 104(c), 42 U.S.C. Section 9604(c). The total project ceiling, if approved, will be **\$20,000,000**. Of this, an estimated **\$19,700,000** comes from the EPA Headquarters allowance.

APPROVED _____ DATE _____

Attachments

BIASCO:L:\AGSTREET.AM4:X6673:8/14/97: