

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

MAY 25 2004

SUBJECT: Request for Additional Funding, and Exemption from the 12 Month and \$2 Million Statutory Limits for a Removal Action, Hamburg - Kaercher Creek Site Hamburg Borough, Berks County, Pennsylvania

FROM: Abraham Ferdas, Director 
Hazardous Site Cleanup Division (3HS00)

TO: Marianne L. Horinko, Assistant Administrator
Office of Solid Waste and Emergency Response (5101)

THRU: Debbie Dietrich, Director
Office of Emergency Prevention, Preparedness and Response (5201)

ATTN: Mark Mjones, Associate Director
Emergency Response and Removal Staff (5204G)

ISSUE

The attached Request for an Exemption from the 12-month and \$2 million statutory limit for a Removal Action, and a request for additional funds, pertains to the Hamburg - Kaercher Creek Site. This Site consists of sections of a creek that runs through Hamburg, Pennsylvania. There are several crushed battery casing disposal areas along the creek. There are crushed battery casings visible over a large portion Kaercher Creek. There are homes adjacent to portions of the creek, along with commercial and industrial properties.

The On Scene Coordinator (OSC) conducted removal assessments of this creek. This assessment confirmed the presence of moderate to high levels of lead on the banks and in the sediments of the creek, posing a threat to public health and welfare due to the potential exposure to hazardous substances in these areas, and the potential release of substances present on the Site to downstream areas. The Agency for Toxic Substances and Disease Registry (ATSDR) evaluated the results from the sampling at this Site and stated that this Site represents a public health hazard. ATSDR recommended that the soil and creek sediments be remediated to a safe level. Lead is listed as hazardous substance under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as identified at 40 CFR Section 302.4. The Site poses a threat to public health due to the actual or potential release of lead from the battery waste used as fill material.

This Site has been the subject of a Time-Critical Removal Action since May 2003 (Memorandum from Gregory Ham to Abraham Ferdas, re: Request for Funds for a Removal Action

Hamburg - Kaercher and Mill Creeks Site", approved May 13, 2003 -"Action Memorandum"). In order to mitigate the additional threats and to complete ongoing response actions, additional funding will be necessary. Based upon current information, the OSC anticipates that the response action will exceed \$2 Million and will continue for more than 12 months from the date of mobilization to the Site. However, the OSC has determined that the Site meets the criteria for emergency exemption from both the \$2 Million and 12-Month Statutory Limits for Removal Actions identified within the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended, (CERCLA), 42 U.S.C. § 9604(c)(1)(A)).¹

The OSC has determined that the conditions at the Kaercher Creek Site meet the criteria for continuing a Removal Action under the NCP, 40 CFR §300.415. Additional funds in the amount of \$1,658,520 are being requested. This will raise the project ceiling from \$1,901,000 to \$ 3,559,520, of which \$3,339,520 are from the Regional removal allowance, to mitigate the threats posed by this Site.

Pursuant to Redelelegation of Authority 14-2 giving the Director, Hazardous Site Cleanup Division, authority to approve 12-month and \$2 million (up to \$6 million) exemptions for CERCLA Removal Actions, Region III has approved this request for an exemption and request for additional funds.

Attachment: Request for Removal Action

¹ Authority to approve continued removal action beyond the statutory limitations pursuant to the "Emergency Waiver" set forth in Section 104(c)(1)(A) of CERCLA, 42 U.S.C. § 9604(C)(1)(A), up to a total removal action cost of \$6 million, has been delegated to the Director of the Region III Hazardous Site Cleanup Division pursuant to EPA Delegation 14-2-A.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

MAY 28 2004

SUBJECT: Request for Additional Funding, and Exemption from the 12 Month and
\$2 Million Statutory Limits for a Removal Action
Hamburg Lead - Kaercher Creek Site
Hamburg Borough, Berks County, Pennsylvania

FROM: Gregory Ham, On-Scene Coordinator
Removal Response Section (3HS31)

TO: Abraham Ferdas, Director
Hazardous Site Cleanup Division (3HS00)

I. PURPOSE

The purpose of this memorandum is to request an exemption from the 12 month and \$2 million statutory limitations for removal actions in order to continue a Removal Action at the Hamburg - Kaercher Creek Site (Site), and to request additional funding for this Removal Action. The Site consists of portions of Kaercher Creek, a stream that runs through Hamburg Borough in close proximity to several lead sites in Hamburg. Battery wastes have been disposed of at several locations along this Creek, resulting in lead contamination on the banks and in the sediments. The Creek also runs through the property on which the battery manufacturing occurred. The Creek flows through a residential/commercial area of Hamburg, Berks County, Pennsylvania. The contaminant of concern at the Site is lead which is a listed hazardous substance in accordance with 40 CFR Section 302.4.

This Site has been the subject of a Time-Critical Removal Action since May 2003 (Memorandum from Gregory Ham to Abraham Ferdas, re: Request for Funds for a Removal Action Hamburg - Kaercher and Mill Creeks Site", approved May 13, 2003 -"Action Memorandum"). (The Mill Creek portion of the work was later removed from this Removal Action.) The OSC finds that conditions at the Site continue to pose threats that meet the criteria for Removal Action set forth in Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). These threats are further described in Section III of this Action Memorandum. In order to mitigate the additional threats and to complete ongoing response actions, additional funding will be necessary. Based upon current information, the OSC anticipates that the response action will exceed \$2 Million and will continue for more than 12 months from the date of mobilization to the Site. However, the OSC has determined that the Site meets the criteria for emergency exemption from both the \$2 Million and 12-Month Statutory Limits for Removal Actions identified within the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended, (CERCLA), 42 U.S.C. § 9604(c)(1)(A)).¹

¹ Authority to approve continued removal action beyond the statutory limitations pursuant to the "Emergency Waiver" set forth in Section 104(c)(1)(A) of CERCLA, 42 U.S.C. § 9604(C)(1)(A), up to a total removal action cost of \$6 million, has been delegated to the Director of the Region III Hazardous Site Cleanup Division pursuant to EPA Delegation 14-2-A.

The exemption from the time limit is needed for several reasons. This project involved the cleanup of over 1 mile of creek (approximately 6,200 linear feet), and could not be completed within the one year time frame. A Potentially Responsible Party (PRP) for the site, Exide Corporation, signed an agreement on consent to conduct the Creek cleanup on the portion of the Creek on property owned by them. This portion of the work took approximately three months, during which time the Environmental Protection Agency (EPA) could not complete work on the section of the Creek downstream of the Exide property. It is necessary to complete the work moving sequentially downstream. If this was not done, work on an upstream section could result in the recontamination of downstream sections. In addition, during much of the project there was frequent rain, which slowed the project down.

The approval for exceedance of the \$2 Million ceiling is needed for a number of reasons. The restoration of the first phase of the project was more costly than estimated. While excavation and disposal costs were in line with original estimates, restoration of the Site took longer and cost more than anticipated. The Fieldhouse section, which was the first section completed, was steeper and higher than the lower sections, and therefore took more time and effort to complete. A long arm excavator was required for this section, which added additional expense. Also, the weather delays discussed above also resulted in increased costs to the project.

The OSC also determines that additional CERCLA funding, including an additional \$1,658,520 from the Regional removal allowance, is necessary to continue to mitigate the Site threats identified in this Action Memorandum. The increased funding raises the total Removal Action Estimated Project Ceiling to \$3,559,520, of which \$3,339,520 are from the Regional removal allowance.

II. SITE CONDITIONS

A. Site Description

The Site consists of portions of Kaercher Creek, a stream that runs through Hamburg Borough in close proximity to several lead sites in Hamburg. Battery wastes have been disposed of at several locations along this Creek, resulting in lead contamination on the banks and in the sediments. Figure 1, Site Location Map, shows the Site location within the Borough of Hamburg. The Site coordinates are 40.55352° north latitude and 75.98571° west longitude (these are the coordinates for Kaercher Creek at the Price Battery plant, which is approximately the mid-point of the affected area of the creek). The creek passes through a number of privately owned properties and some municipal properties. Portions of the creek are relatively accessible, while some portions have steep banks or are channelized. No portions of the creek are totally inaccessible, although some of the channelized sections run underneath buildings or roads in town.

Kaercher Creek flows from Kaercher Creek Park just outside the eastern border of Hamburg, past the Cornfield and Geary Drive Sites, past the Fieldhouse Site, into town, underneath the former Price Battery Plant Site, and then to its discharge point into the Schuylkill River. All of these Sites were assessed, and all were found to contain elevated lead levels, except for the Geary Drive Site.

By counting the number of residential units in a 0.25-mile radius and multiplying by the persons per household county average, the estimated population may be determined within a 0.25-mile radius. The county average persons per household is 2.56, slightly higher than Hamburg's average of 2.16. The total population of the Hamburg Borough is 4,114, and the total number of housing units in Hamburg is 1,801. About 567 homes are located within 0.25 mile of the Site (U.S. Geological Survey [USGS] 1977). Using the Borough average, about 1,225 people live within 0.25 mile of the Site. About 1,104 homes are located within a 0.5-mile radius of the Site (USGS 1977). Using the Borough average, about 2,384 people live within 0.5 mile of the Site.

B. Background

The Price Battery plant operated in Hamburg Borough from 1918 to the mid-1990's. During this time there were several different owners of the plant. During operations, battery casings were broken open, and the lead plates inside the batteries were removed for resmelting. The casing materials were given away as fill, and deposited in many places throughout the Borough. In 1994, the EPA began investigating the first of these areas. EPA conducted a Removal Action (RA) at the playground located at the Hamburg Lead Site, located to the south of the I-78 overpass. During this RA, the portion of the Schuylkill Canal located at the Playground was excavated, covered with clean fill, and capped with asphalt. This area is now used as a parking lot for the municipal park. Additional areas were covered with riprap along the bank of the Schuylkill River. No work was conducted beyond the limits of the parking lot. At a later date, an RA was conducted at the Fieldhouse, where battery casings had been used to surface the parking lot. Some wastes were removed, and the lot was paved to eliminate exposure to lead wastes; however the banks of Kaercher Creek were not addressed. In March 2000, the EPA performed a removal assessment of various areas of concern in the Borough of Hamburg, including the banks of the Schuylkill River adjacent to the municipal park. During this assessment, it was noted that the canal extended north beyond the I-78 overpass. On October 6, 2000, the EPA performed a removal assessment of this area that is named the Schuylkill Canal and Towpath (SCT). As a result of these investigations, several additional RA's were initiated.

Removal assessments were done on this Site in two different events. In August 2002, EPA OSC Greg Ham, using the Superfund Technical Assistance and Response Team (START), conducted a removal assessment of Kaercher Creek from just downstream of Kaercher Creek Park to the upstream edge of the former Price Battery plant property. In September/October 2002, a removal assessment of the former Price Battery plant, including Kaercher Creek within and downstream of the plant, was conducted. The creek portions of these assessments were intended to determine lead concentrations in sediments and bank soils to a depth of 12 inches. In addition, surface water samples were taken at some locations. Figures 1, 6, and 8 identify the sampling locations and structures located within the area of concern (AOC).

All samples were analyzed by x-ray fluorescence (XRF) technology, following the EPA Environmental Response Team standard operating procedures. Ten percent of the samples (one of every 10) were sent to an EPA Contract Laboratory Program (CLP) laboratory for confirmation of lead results by XRF analysis

C. Quantities and Types of Substances Present

Lead contamination has occurred at this Site due to disposal of lead contaminated battery casings at properties along the creek, and from downstream migration of lead from these disposal areas and the former Price Battery Plant itself (for the downstream portion of Kaercher Creek), through erosion and flooding. Due to the lack of homogeneity of the dumping and the number of areas where dumping occurred, the cubic yardage of contaminated material is not yet known. Based on the surface area of the contamination and an estimated depth of fill in these areas, it is estimated that there are 4,600 cubic yards of lead contaminated materials at this Site.

For Kaercher Creek above the former Price Battery plant, 86 soil samples and 38 sediment samples were collected. Of these, 49 soil samples and 21 sediment samples exceeded 400 parts per million (ppm). All but one of these samples exceeding 400 ppm were downstream of Pine Street. Six of the sediment samples and 34 of the soil samples exceeded 1,000 ppm (including twelve soil samples along the banks at the Fieldhouse). The highest levels of lead found in the samples were: on the creek banks 23,590 ppm; along the top of the banks at the Fieldhouse 45,184 ppm; in the creek sediments 2,148 ppm. This area has all been addressed by the ongoing Removal Action.

For Kaercher Creek downstream of the former Price Battery plant, 75 soil samples and 40 sediment samples were collected and analyzed for lead. 66 of 75 soil samples and 38 of 40 sediment samples exceeded 400 ppm for lead, with highs of 19,100 ppm and 62,259 ppm respectively. 59 soil samples and 36 sediment samples exceeded 1,000 ppm of lead. Lead battery waste (casing fragments) were observed at the soil surface and in Kaercher Creek sediments from just below Pine Street all the way to the Schuylkill River. The length of contaminated banks and sediments along Kaercher Creek below the former battery plant is approximately 4,800 feet. To date, only the first 500 feet of this section has been addressed by the ongoing Removal Action.

D. National Priorities List

The Site is not on the National Priorities List (NPL). Information on the Kaercher Creek Site has been provided to the Site Assessment program and EPA managers for evaluation for listing the Site on the NPL.

E. State and Local Authorities

The OSC has coordinated with both Pennsylvania Department of Environmental Protection (PADEP) and Borough of Hamburg officials regarding the actions anticipated at the Site. The local government does not possess the funding to take the actions which the OSC proposes. PADEP is focusing on other priorities with their available funding and is therefore unable to address this Site at the present time

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

Section 300.415 of the NCP lists the factors to be considered in determining the

appropriateness of a Removal Action. Paragraphs (b)(2)(i), (iv), (v), and (vii) of Section 300.415 directly apply as follows to the conditions as they exist at the Site.

300.415 (b)(2)(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants

No actual exposure to lead battery waste has been documented by the OSC at this Site. However, this creek flows through residential, commercial, and industrial areas of Hamburg. There are no fences or other barriers (other than heavy vegetation) restricting access to these areas. The creek flows into the Schuylkill River, which is used in this area for fishing and recreation. Evidence of human activity along the banks of the River at the mouth of the creek was noted during the assessment.

For Kaercher Creek below Pine Street (just upstream from the Fieldhouse), 115 soil samples (83% of all soil samples taken) and 59 sediment samples (92% of sediment samples taken) had lead levels higher than 400 ppm. Lead levels as high as 19,100 ppm in soils and 62,259 ppm in sediments were found in the section of the creek that has not yet been addressed by this Removal Action.

Lead is poisonous to humans by ingestion and inhalation. It is a suspected carcinogen in the lungs and kidneys. Human systemic effects by ingestion and inhalation are loss of appetite, anemia, malaise, insomnia, headache, irritability, muscle and joint pains, tremors, hallucinations, distorted perceptions, muscle weakness, gastritis, and liver changes. Lead also affects the human nervous system, the blood system and the kidneys. Chronic exposure can lead to irreversible vascular sclerosis, tubular cell atrophy, interstitial fibrosis, and glomerular sclerosis. Severe toxicity can cause sterility, miscarriage, and neonatal mortality and morbidity.

The OSC has submitted data packages to the Agency for Toxic Substances and Disease Registry (ATSDR) for their review and recommendations regarding actions to protect public health. In a Health Consultation dated January 2, 2003, the ATSDR representatives who had reviewed the reports on the creek indicated that this Site represents a public health hazard and recommended that the battery casings and debris and soil in the affected areas be remediated to a safe level. In addition, ATSDR recommended that additional samples be collected and analyzed for lead in areas of the Site where flooding could have occurred. In the ongoing Removal Action, approximately 1,400 feet of stream adjacent to the Fieldhouse have been addressed, along with approximately 500 feet just downstream of the former battery plant. However, there remains approximately 4,300 feet of contaminated stream that continues to present a threat.

300.415 (b)(2)(iv) High levels of hazardous substances or pollutants or contaminants near the surface that may migrate

Lead concentrations of up to 19,100 ppm have been documented at this Site located in the waste which is not yet protected from further release. Elevated levels of lead as high as 62,259 ppm have also been found in sediments of the creek in the section not yet completed.

Due to the uncontrolled access to the Site, these contaminants have the potential for migrating primarily from stream flooding and erosion, particularly during storm events, or from typical human activities such as walking, or playing in or along the creeks. ATSDR has indicated that this Site represents a public health hazard and recommended that the battery casings and debris and soil in the affected areas be remediated to a safe level.

300.415 (b)(2)(v) *Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released*

This Site consists of areas of lead contamination in Kaercher Creek, or on the banks of the creek. Precipitation (annual precipitation for Hamburg of 47.28 inches, year 2000) and storm conditions in this part of Pennsylvania could cause the migration of the lead contamination into the creeks and downstream to areas beyond the current extent of contamination. There are a number of residential, commercial and industrial properties along the creeks, and there are numerous access points to contaminated areas.

300.415 (b)(2)(vii) *The availability of other appropriate Federal or State response mechanisms to respond to the release*

The local government does not possess the funding to take the actions which the OSC proposes. PADEP is focusing on other priorities with their available funding and is therefore unable to address this Site at the present time.

IV. ENDANGERMENT DETERMINATION

Actual or threatened release of pollutants and contaminants from this Site, if not addressed by continued implementation of the response action selected and described in this Action Memorandum, will continue to be an imminent and substantial endangerment to the public health, or welfare, or the environment. ATSDR has indicated that this Site represents a public health hazard to the residents of the area.

V. EXEMPTION FROM STATUTORY LIMITS

The exemption from the one year time limit is needed due to the length of the section of the creek that needed to be addressed (over 6,200 feet), the necessary sequencing of the cleanup project (coordinating with the PRP-lead portion of the work), and delays due to weather. The delays noted above resulted in additional costs, along with extensive restoration requirements necessary to restore the creek bed.

The hazardous substances at the Site continue to pose a threat to human health and the environment and will continue to pose this threat until the Removal Action identified in this Action Memorandum is completed. The Removal Action will require additional funding to enable the OSC to complete the removal of the exposure to hazardous substances from lead contaminated soils and sediments. This additional funding will result in a total estimated project ceiling which is greater than \$2 Million. In addition, the amount of work and the

delay to wait for completion of the PRP portion of the work will cause the project schedule to exceed the 12-Month limitation on Removal Actions.

The Site meets the "emergency exemption" criteria set forth in Section 104(c)(1)(A) of CERCLA, 42 U.S.C. § 9604(c)(1)(A), for exceedance of the \$2 Million and 12-Month statutory limits for Removal Actions as follows:

- A. Section 104(c)(1)(A)(i) **“Continued response actions are immediately required to prevent, limit, or mitigate an emergency”**

The focus of the ongoing Removal Action has been to eliminate potential exposure to lead contaminated soils and sediments at the Site. The Site is not secure, access is not restricted, and signs of trespass are evident. The Site is not fenced. Trespassers continue to enter the Site (a number of hunters were seen near the Creek during hunting season, and fisherman are expected during the upcoming fishing season).

An uncontrolled release of hazardous substances from the Site poses a threat to the nearby community. Lead levels in the Creek range from 648 ppm to 62,259 ppm in sediments, and from 456 ppm to 19,100 ppm in soils (9 out of 69 soil samples were below the cleanup level of 400 ppm). Additional response actions are immediately required to prevent human exposure to the contaminants and the migration of contamination to the environment. The concentration of hazardous substances at the Site and the poor condition of their containment poses a threat to the public health and the environment. The proposed actions will eliminate the immediate threats by reducing the potential for exposure to hazardous substances at the Site. Without an exemption from the statutory limits, the Removal Action will not be completed and threats posed by the Site will not be meaningfully reduced.

- B. Section 104(c)(1)(A)(ii) **“There is an immediate risk to the public health or welfare or the environment”**

The hazardous substances in the Creek sediments and soils pose an immediate risk to the nearby community. The soils and sediments contain high levels of lead. Lead is poisonous to humans by ingestion and inhalation. It is a suspected carcinogen in the lungs and kidneys. Human systemic effects by ingestion and inhalation are loss of appetite, anemia, malaise, insomnia, headache, irritability, muscle and joint pains, tremors, hallucinations, distorted perceptions, muscle weakness, gastritis, and liver changes. Lead also affects the human nervous system, the blood system and the kidneys. Chronic exposure can lead to irreversible vascular sclerosis, tubular cell atrophy, interstitial fibrosis, and glomerular sclerosis. Severe toxicity can cause sterility, miscarriage, and neonatal mortality and morbidity.

There are no restrictions to access along the Creek in the project area, there have been people observed along the Creek, and there are signs of recreational use where the Creek meets the Schuylkill River.

C. Section 104(c)(1)(A)(iii) "Assistance will not otherwise be provided on a timely basis"

The local government does not possess the funding to take the actions which the OSC proposes. PADEP is focusing on other priorities with their available funding and is therefore unable to address this Site at the present time. EPA has identified the potentially responsible party (PRP), and they have agreed to do some of the work at the Site, but not the portion addressed by this Removal Action.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Action

The Removal Action proposed for the Site is designed to mitigate the imminent threat posed to the public health, welfare and the environment by removing and/or stabilizing the lead contaminated soil, sediments and debris in the surface soils and creek bed at the Site. Unless otherwise specified by ATSDR, generally cleanup actions will be performed where lead is found in concentrations above 400 ppm. This number was selected to be protective of human health and to protect the ecological health of the creek. In areas that are relatively inaccessible (channelized areas or areas where the stream flows through culverts), a level of 1,000 ppm will be used to determine if a cleanup is needed. This level was selected to remain consistent with the cleanup strategy at other Hamburg Lead Sites, including at the Berry Property, Hamburg Playground, Port Clinton Avenue, and the Railcut locations.

The proposed action consists of the following activities:

- Mobilize personnel and equipment to the Site as necessary.
- Restrict access to those areas of the Site where high levels of lead are present at the surface. At a minimum, place warning signs along contaminated areas of the creek.
- Develop and implement a sampling plan to determine the extent of lead contaminated soil, sediments and debris at the Site and to determine the specific areas needing to be addressed.
- If necessary, implement measures to divert the flow of the creek around work areas (construction of a dam just upstream of work areas, pumping water around the work area, discharging in downstream areas).
- Remove and properly dispose of lead contaminated soils, sediments, and debris found at the surface of the Site, on the banks, or in the stream bed, as needed to properly install a proper cover. Work will proceed from upstream areas, working downstream. Evaluate onsite treatment of lead contaminated soils and sediments, and if feasible, complete onsite treatment before disposal.

- Stabilize environmentally sensitive areas from further exposure and effects from lead waste, sediments and soil.
- Cover with clean soil, coir logs and/or matting, rip rap, or other appropriate fill materials and restore areas of the Site to prevent direct contact with lead contaminated soil and debris below the surface, if needed. In areas where lead contamination will remain below the surface, place a barrier (filter fabric, liner, hi-visibility safety fencing, or other material approved by the OSC) above the contamination to prevent exposure to these areas, prior to placement of fill materials.
- Implement institutional controls, as needed, to prevent future excavation or disturbance of areas where contamination is left below the surface.
- Vegetate and restore affected areas with appropriate plantings and/or seeds.

This Removal Action will be conducted in phases, beginning with the upstream sections and working downstream, to minimize impacts on already cleaned areas. Under this Removal Action to date, EPA has conducted the actions above for the first section of the Creek (approximately 1,900 feet) and the PRP for the Site has completed the Removal Action for that section of Kaercher Creek within the former Price Battery plant itself.

B. Summary of Costs

Extramural Costs	Original Ceiling	Revised Ceiling
Regional Allowance Costs	\$1,450,000	\$2,746,270
Other Extramural Costs Not Funded from the Regional Allowance		
START Contractor	84,000	170,000
Total CLP	50,000	50,000
Subtotal, Extramural Costs	\$1,584,000	\$2,966,270
Extramural Costs Contingency (20% of Subtotal, Extramural Costs)	317,000	593,250
TOTAL REMOVAL PROJECT CEILING	\$1,901,000	\$3,559,520

C. Contribution to Remedial Performance

There are currently no plans for long-term Remedial Action. The proposed Removal Action, however, is not inconsistent with accepted removal practices and is expected to abate

the threats that meet the NCP removal criteria. The proposed action is not anticipated to impede any future responses at this Site.

D. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)

The proposed Removal Action set forth in this Memorandum will comply with applicable or relevant and appropriate environmental and health requirements, to the extent practicable, considering the exigencies of the situation. Federal and State ARARs will be complied with to the extent practicable during all phases of this Removal Action.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD NO ACTION BE TAKEN OR ACTION DELAYED

If no action is taken or if action is delayed, the threat to human health, welfare or the environment will continue. Unless mitigation of the source of contamination (battery casings and contaminated soil and sediments) is conducted, a continual threat will exist to the persons who frequent the Site area. Furthermore, should the battery casings and contaminated soil and sediments remain unstable and no response be taken, contaminant migration from the erosion of source areas will continue.

VII. ENFORCEMENT

See attached Confidential Enforcement Addendum.

The total EPA costs for this Removal Action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$5,669,748.²

VIII. OUTSTANDING POLICY ISSUES

There are no known outstanding policy issues associated with this Site.

² Direct Costs include direct extramural costs and direct intramural costs. Indirect Costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgement interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

IX. RECOMMENDATION

Conditions at the Hamburg - Kaercher Creek Site meet the NCP Section 300.415(b) criteria for a removal and I recommend your approval of the proposed Removal Action. The total Removal Action Project Ceiling if approved will be \$3,559,520. Of this, an estimated \$3,339,520 comes from the Regional Removal Allowance.

This decision document represents the selected Removal Action for the Hamburg - Kaercher Creeks Site, in Hamburg, Pennsylvania, developed in accordance with CERCLA as amended, and not inconsistent with the NCP. This decision is based on the Administrative Record for the Site.

APPROVED: Chlu Fend DATE: 5/24/04

DISAPPROVED: _____ DATE: _____

Attachments:

1. Site Location Maps
2. Site Sampling Maps
3. ATSDR Health Consultation
4. Confidential Enforcement Addendum