

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

MAY 23 2008

MEMORANDUM

SUBJECT: ENFORCEMENT ACTION MEMORANDUM - Request for a Non-Time-Critical Removal Action at the Bessie Williams Site, Copley, Ohio (Site ID # 05ZT)

FROM: Thomas G. Williams
Remedial Project Manager

TO: Richard C. Karl, Director
Superfund Division

THRU: Jason El-Zein, Chief *2F & for*
Emergency Response Branch #1

EPA Region 5 Records Ctr.



301521

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of a non-time-critical (NTC) removal action at the Bessie Williams Site ("BW" or the "Site") located in, Copley, Ohio. The Site is a former landfill and lead waste area, approximately 40 acres of a 107-acre property (Figure 1). The United States Environmental Protection Agency (U.S. EPA), has determined that the appropriate response action at the Site is the construction of a one foot soil cover over the landfill and a two foot soil cover over the lead contaminated area, as well as institutional controls on the Site. This action is necessary to abate the continuing imminent and substantial threat to public health and the environment from potential exposure to a hazardous substance (lead). The U.S. EPA has determined that this response action should be conducted as a removal due to the actual or potential exposure of nearby human populations or the food chain to the hazardous substances from the Site. Since at least a six-month planning period is available before on-Site activities must begin, the proposed action would be a non-time-critical removal.

II. SITE CONDITIONS AND BACKGROUND

U.S. EPA's response at BW will be a non-time-critical removal action (CERCLIS ID# OHD987045085).

A. SITE DESCRIPTION

1. Removal Site Evaluation

In 1993 and 1994, an Immediate Removal Action (IRA) was performed at the Site involving the removal of approximately 1,300 surficial drums and other potentially hazardous material from the former landfill area. The IRA was based on the Ohio Environmental Protection

Agency (OEPA) Preliminary Assessment and U.S. EPA Site Investigation. The work was performed at the Site in accordance with an Administrative Order issued by U.S. EPA on October 8, 1993 and an approved work plan developed by Nova Chemicals, one of the Potentially Responsible Parties (PRPs) at the Site. The final report on the IRA and Additional Site Investigation Activities (ASIA) was submitted to the U.S. EPA in June 1994. By letter dated July 2, 1998, U.S. EPA indicated that all work under the October 8, 1993 Order had been satisfactorily performed.

2. Physical Location and Background

The Site is located at the west end of Knox Boulevard in Copley Township, Summit County, Ohio (Figure 1). The Site is approximately 40 acres of a 107 acre parcel of property. The Site is a triangular shaped parcel, located south and west of the former Williams residence. Copley Creek borders the Site on the south and west. For many years the property was owned by Mr. Robert and Mrs. Bessie Williams and, after Mr. Williams' death, by Mrs. Williams alone. After Mrs. Williams passed away, the property and the Site itself were purchased at a Sheriff's Sale in 2002 by Mr. Russell Dezelan. Mr. Dezelan continues to be the owner of the Site and the larger tract of property (collectively referred to as the "Dezelan Property"). Environmental characterization activities conducted pursuant to the EE/CA (Engineering Evaluation/ Cost Analysis) Work Plan fully delineated the areal extent of the former landfill area. In addition, these environmental characterization activities identified an area adjacent to the former landfill where elevated concentrations of lead were detected in surface soils. See Figure 2, the Operable Unit map.

Prominent landmarks remaining at the property are the former Williams residence and a former after hours nightclub commonly referred to as the "speakeasy." Both buildings are located near the Knox Boulevard entrance to the east-central portion of the property. These structures are of brick construction and are in dilapidated condition. A concrete block garage and small wooden shed also remain in dilapidated condition. It has been reported by Mr. Dezelan that an underground pipeline extends from a gas well located in the southeastern portion of the Site to the former residence and possibly to the speakeasy. No other above-ground or below-ground utilities are known to be present on the Site.

Based on the environmental characterization findings, the physical area of the Site has been more thoroughly defined and, for organizational purposes, has been divided into two physically discrete Operable Units (OUs):

OU1 - The former landfill area, which actually covers approximately 18.6 acres of land to the north of Copley Creek and to the west of the former Williams residence. Various waste materials are known to have been disposed in this area and surface debris (shingles, brick, wood, metal, glass, etc.) is present in and around the perimeter of this area; (Figure 3)

OU2 - The "surficial lead" area, which generally covers approximately five acres to the west/northwest of the former "speakeasy." Surface debris (shingles, brick, wood, metal, glass, etc.) is present in this area and notably elevated concentrations of lead exceeding the Ohio Voluntary Action Program (VAP) industrial land use generic direct contact standard of 1,800 mg/kg have been detected in surface soil in this area. (Figure 4)

It is believed that Mr. and Mrs. Williams operated the Site from the late 1950's to the middle 1980's as an unlicensed landfill. This landfill was used by various waste haulers and other people in the area for the disposal of construction, industrial, municipal, commercial, and residential wastes.

The Dezelan Property has been vacant since 1994, when Mrs. Williams moved to a nursing home. Vehicular access to the Dezelan Property is presently limited by a locked gate located at the western end of Knox Boulevard.

The Site and its immediate surroundings are heavily wooded. The natural topography of the area is generally flat to rolling hills. Ground surface elevations range from approximately 975 feet above mean sea level (msl) near the former Williams residence to approximately 965 feet above msl along Copley Creek. The ground surface slopes generally to the west and southwest.

The geomorphology of Summit County, Ohio includes landforms such as ground moraines, end moraines, kames and kame terraces, outwash plains, valley trains, bogs, floodplains, and lake plains. All of these landforms are either directly or indirectly a result of glacial activity occurring during the Pleistocene Period. Sediments were deposited as a result of the advancement and retreat of glacial lobes within the Illinoian or Wisconsinan Age.

The Site is located in an area of alluvial deposits. These deposits typically include silt and silty sand in the floodplains, and peat or organic sediments within bog and marsh deposits. Bedrock is reported to occur at an elevation of approximately 600 feet msl beneath the Site, which would place the bedrock surface at approximately 370 feet below ground surface. The bedrock surface in the Site area reportedly dips to the northeast.

Surface soils at and in the immediate vicinity of the Site have been described based on the well logs of twelve shallow monitoring wells installed for the purposes of investigating the Site. Fill materials, which include wood, brick, glass, concrete, cloth, rubber, plastic, metal, and other materials, are present at the ground surface across most of the former landfill area of the Site to depths of up to five feet. A peat unit (identified in the 1974 USDA/SCS Soil Survey as the Carlisle Muck) is present at ground surface to the north, west, and south of the former landfill area, as well as beneath the landfilled materials in the western half of the former landfill area. The peat unit ranges to a thickness of more than 30 feet where encountered during monitoring well installation activities. A loamy soil unit of glacial outwash origin (identified as the Olmstead Series in the Soil Survey of Summit County (USDA/SCS, 1974) is present at ground surface to the east/northeast of the former landfill area, as well as beneath the landfilled materials in the eastern portion of the former landfill. Both soil series at the Site are considered hydric soils (see the Wetlands Evaluation Report performed pursuant to the approved Work Plan and included in Appendix A of the EE/CA).

Shallow groundwater at the Site occurs between 4 and 12 feet below ground surface, within a unit consisting of interstratified clay, silt, and occasional sand and gravel lenses. This unit produces only enough water for monitoring purposes and does not produce sufficient water to be used as a potable water supply. Due to the presence of clay and silt, groundwater from the wells in this unit is also very turbid. Groundwater flow directions in this unit appear to be localized, and are influenced by topography, with a predominant southerly flow direction.

A sand and gravel unit underlies the shallow water-bearing zone. This unit is reported to be the primary aquifer used for residential wells in the area. Flow rates of five to 20 gallons per

minute are readily attainable from wells drilled to depths of less than 65 feet in this unit. Water level data from monitoring wells installed in this unit indicate that the groundwater flow direction at the Site is generally to the southeast.

Surface water in the vicinity of the Site flows generally to the west and southwest into Copley Creek. Copley Creek is a low velocity creek that flows into Pigeon Creek, which in turn flows into Wolf Creek and ultimately into the Ohio River. The Floodway and Flood Boundary Map and the Flood Insurance Rate Map for Summit County, Ohio show that both Copley Creek and a portion of the Site are within the 100-year floodplain. The base flood elevation is at 967.0 feet msl, considering backwater effects from Wolf Creek.

Land use in the general area (bounded by Collier Road to the east, State Route 261 to the south, Summit and Jacoby Roads to the west, and Wright Road to the north) consists of a mixture of residential, commercial and agricultural properties. Land use to the east of the Site is primarily residential. A wooded area (part of the remaining Dezelan Property) lies immediately to the south of the Site. The southern boundary of the Dezelan Property coincides with the southern boundary of Copley Township. Beyond this wooded area to the south lies a mixture of commercial and residential properties along Highway 261, including a permitted construction and demolition debris (C&DD) landfill. Immediately to the west and north of the Site is a wooded area that is part of the Dezelan Property. A former truck farm, now being developed as a wetlands mitigation bank, lies to the west-southwest, beyond Copley Creek. To the west beyond this property are two residential areas. Residential properties also occupy the land to the north between the northern boundary of the Dezelan Property and Wright Road.

There are approximately 150 to 200 residences in the area described above. Based upon the assumption of an average of four (4) persons per home, the population in this area is estimated to be 600 to 800.

In Ohio, the low income percentage is 30 and the minority percentage is 16. To meet the Environmental Justice (EJ) criteria, the area within 1 mile of the Site must have a population that's twice the state low income percentage and/or twice the State minority percentage. That is, the area must be at least 60% low-income or 26% minority. At this site, the low income percentage is 60% and the minority percentage is 32% as determined by Arcview or Landview III EJ analysis. Therefore, this Site does meet the region's EJ criteria based on demographics identified in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998".

3. Site History

An IRA was performed at the former landfill area of the Site (OU1) between November 1993 and April 1994, pursuant to the 1993 Order. The purpose of the IRA was to catalog, assess, classify, and remove all identified surficial drums within the Site boundary. Surficial drums were defined as any drum with any portion of its outer surface extending above local ground surface. During the implementation of the IRA, the following materials were removed from the Site and properly disposed:

1. 1343 surficial drums;
2. 165 cubic yards of solid polystyrene, stained soil, filters, and personal protective equipment;
3. 75 cubic yards of "RCRA Empty" crushed drums;
4. 25 drums containing flammable liquids;
5. 147 drums containing combustible material;

6. 4,800 pounds of medical waste; and
7. Two fuel oil tanks (10,000-gallon and 2,000-gallon capacities).

The approved Work Plan also included provisions for performing additional site investigation activities, to better define the nature and extent of environmental quality effects. The results of the IRA/ASIA activities are presented in an approved Final Report, dated June 1994.

As more fully described and substantiated in the IRA/ASIA Final Report, shallow groundwater quality has not been affected by volatile organic constituents (VOCs) or semi-volatile organic constituents (SVOCs). Similarly, the sampling results from 44 nearby residential wells indicated that groundwater quality was not affected. The constituent bis(2-ethylhexyl)phthalate was detected at low concentrations in three of the residential wells. The IRA/ASIA Final Report concluded that this constituent, which is commonly found in plastic materials, was likely related to the plumbing systems and was not related to the Site. Copley Creek surface water and sediment quality have also not been affected by Site waste disposal activities. Surface soils in the former landfill area (OU1) contained detectable, but low concentrations of SVOCs in the zero- to five-foot depth interval. These concentrations were determined to be within the ranges reported for rural and agricultural soils. A 1991 soil gas screening survey identified several areas where VOCs were present; however, soil sampling performed during the ASIA did not detect the presence of VOCs.

The IRA/ASIA Final Report concluded that:

Based on the low and infrequent quantification of constituents analyzed in the on-site soil and groundwater and off-site groundwater, it appears the Site has had no significant impact on human health or the environment due to the materials identified at the Site.

4. Release or Threatened Release into the Environment of Hazardous Substances or Contaminants

To confirm the IRA/ASIA findings, additional characterization tasks were performed at the Site under a 1995 Administrative Order by Consent signed by NOVA Chemicals and Millennium Holdings (the Respondents) to conduct an Engineering Evaluation/Cost Analysis (the 1995 EE/CA AOC). This work was performed from November 1994 through March 1996, in accordance with the approved EE/CA Work Plan, and included the following activities:

1. Excavation of a series of test trenches around the periphery of the former landfill area;
2. Installation of monitoring wells in presumed upgradient and downgradient locations in the sand and gravel unit, and collection and analysis of two rounds of groundwater samples from these wells;
3. Collection and analysis of additional sediment samples in Copley Creek;
4. Collection and analysis of additional surface soil samples in a grid pattern; and
5. Installation of geotechnical borings and geotechnical analysis of peat samples.

A series of thirty-six test trenches were excavated around the periphery of the former landfill area to define the horizontal limits of the buried materials. The locations of these test trenches are shown on Figure 5. Final locations of each test trench were approved by an OEPA representative prior to excavation. A photo-ionization detector (PID) was used to screen the excavated soil for the presence of VOCs. The test trenching activities delineated the areal extent of Operable Unit 1, and indicated that landfill materials are present over an 18.6-acre area. No

buried drums were encountered during test trenching activities, and no VOCs were detected by the PID.

Groundwater samples were collected from MW-1B, MW-2B, MW-3B, and MW-11B on November 28,29, 1995, and again on March 11, 1996. The field data collected during these sampling events, as well as field data collected during previous sampling events, are provided in Table 1. No VOCs were detected in any of these groundwater samples. The SVOC bis(2-ethylhexyl)phthalate was detected at 0.03 mg/L in MW-1B during Round 1 but not detected in Round 2 (detection limit of 0.01 mg/L).

Two monitoring wells (MW-1B and MW-3B) were sampled on September 22, 1998 for bis(2-ethylhexyl) phthalate analysis. Special precautions were taken during sampling and analysis to ensure that cross-contamination from sampling equipment, containers, and laboratory conditions (which are a common cause of the detection of this constituent in environmental samples) did not occur. The results of the subsequent sampling for bis(2-ethylhexyl)phthalate demonstrated that this constituent is not present in groundwater, at a detection limit of 0.60 ug/L. Therefore, it can be concluded that there are no groundwater concerns that presently exist at the Site.

Copley Creek sediment sampling found no contamination that required further action. See Table 1-5 (VOCs), Table 1-6 (SVOCs), and Table 1-7 (Inorganics and PCBs) in the EE/CA. Surface sampling results indicated significant contamination in OU2 of lead exceeding the Ohio VAP industrial land use generic direct contact standard of 1,800 mg/kg was present. Lead was also detected in OU1, at levels less than 1,800 mg/kg, but significantly above background concentrations. See Figure 3.

5. NPL Status

The Site is not currently on the National Priorities List (NPL). However, U.S. EPA collected data during previous removals and the data indicated that the Site would score high enough on the Hazard Ranking System to qualify for listing on the NPL. The preliminary Hazard Ranking System site score of 56 was based on presumed onsite groundwater contamination and soil contamination, but was highly biased on future groundwater contamination that has not materialized as determined in the EE/CA.

B. OTHER ACTIONS TO DATE

1. Previous Actions

As discussed earlier, a time critical removal action was conducted at the Site to eliminate off-site releases and minimize direct contact with contaminated material. Preliminary investigations were performed at the Site. Based on this information, on February 28, 1995, the Respondents entered into an AOC with the U.S. EPA to conduct an EE/CA.

Previous actions taken by state and local governments are discussed below in Section C.1.

2. Current Actions

The Respondents submitted an EE/CA which was released to the public in February 2008. The proposed Alternative is Alternative 2 for both operable units, which consists of a one foot soil cover for OU1 and a two foot soil cover for OU2, and institutional controls for both operable units and abandonment of all previously installed monitoring wells. Written comments were accepted from February 11, 2008 until March 12, 2008. Two written comments were received and are summarized in the Responsiveness Summary and the actual comments are located in the Administrative Record.

C. ROLE OF STATE AND LOCAL AUTHORITIES

1. State and Local Action to Date

As stated previously, a Preliminary Site Assessment was conducted by the Ohio EPA which led to the IRA and ASIA being performed.

On July 22, 1994, a Health Consultation Report for the BW Site was released by the U.S. Department of Health and Human Services. The health evaluation had been performed under a cooperative agreement between the Ohio Department of Health and the Agency for Toxic Substances and Disease Registry. The report recommended the following:

1. Sample the leachate seeps along Copley Creek.
2. Sample surface soil (0-3") on site.
3. Resample sediment and surface water in Copley Creek.
4. Sample the nearby residential wells at least once a year, starting in 1994, to ensure the safety of the water supply.

These recommendations were incorporated into the EE/CA investigation conducted in 1995 and 1996.

2. Potential for Continued State/Local Response

U.S. EPA expects OEPA will continue to assist in implementing the response actions proposed herein, as well as any further action deemed necessary to control the release and potential release of hazardous constituents at the Site.

III. THREATS TO PUBLIC HEALTH or WELFARE and the ENVIRONMENT

In accordance with Section 300.415 of the National Contingency Plan, U.S. EPA must evaluate certain factors to determine if a removal action is the appropriate response to a situation involving hazardous substances. After analyzing the specific factors set forth below, U.S. EPA has concluded that a non-time critical removal action should be conducted to control the release of hazardous substances from the Site. U.S. EPA's actions are necessary to protect human health, and the environment. The conditions at the Site present a release and a potential threat of a release of a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

hazardous substance, presenting an imminent and substantial endangerment to the public health, welfare, or the environment, and meet the criteria for an emergency removal action provided for in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 C.F.R. §300.415(b)(2). These criteria includes:

- 1) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.

This factor was present at the site due to the presence of lead in surface soils at the Site. Elevated levels of lead were found at the Site. The primary exposure pathway at the BW Site is direct contact (dermal and ingestion) with lead contaminated surface soil. Based on the findings of the Streamlined Risk Evaluation (SRE) in the EE/CA, it was determined that a soil cover would eliminate the direct contact threat in accordance with the Presumptive Remedy Guidance in conjunction with appropriate institutional controls.

Lead is a heavy, low melting, bluish-gray metal that occurs naturally in the Earth's crust. However, it is rarely found naturally as a metal. It is usually found combined with two or more other elements to form lead compounds. Lead poses a threat through inhalation, ingestion, and direct contact routes of exposure. The effects of lead are the same whether it enters the body through breathing or swallowing. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults to lead at work has resulted in decreased performance in some tests that measure functions of the nervous system. Lead exposure may also cause weakness in fingers, wrists, or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people. Lead exposure may also cause anemia. At high levels of exposure, lead can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage. High-level exposure in men can damage the organs responsible for sperm production.

Lead is a characteristic waste under the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901 *et seq.*, as amended, and 40 C.F.R. § 261.24. Lead exhibits the characteristic of toxicity D008, and is therefore a hazardous substance under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

The wetlands delineation performed as part of the EE/CA, using the U.S. Army Corps of Engineers Wetland Manual (January 1987), concluded that wetlands were not present on the Site, but that extensive wetland areas surround the perimeter of the former landfill area (OU1). No record exists of rare species, nor existing or proposed nature preserves or scenic rivers on the Site. No other information of unique ecological concerns, geological features, animal concentrations or champion trees, nor state parks, forests or wildlife is available concerning the Site.

In July 2003, a habitat survey was performed across a large portion of the Dezelan property, including the former landfill area (OU1) and the surficial lead area (OU2). This survey was performed at the suggestion of OEPA to determine if habitat differences were present at the Site that could be attributed to the presence of lead in surface soil. This habitat survey (included in Appendix A of the EE/CA) concluded that any habitat differences noted across the Site were attributable to historical land disturbance related to the former Williams waste disposal operations, and that the presence of lead in surface soil at the Site has not had a negative impact on the Site ecology.

IV. ENDANGERMENT DETERMINATION

Given the Site conditions, the nature of the hazardous substance on-Site, the continued potential release of these substances into the human and ecological exposure pathways identified in the Streamlined Risk Evaluation (SRE) contained in the EE/CA, actual or threatened releases of hazardous substances from this Site may present an imminent and substantial endangerment to public health or welfare and the environment if not addressed by implementing the response action selected in this Action Memorandum.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. PROPOSED ACTION

1. Proposed Action Description

OU1 Alternative 2 from the EE/CA consists of the following: A one-foot thickness of non-specific native soil and a vegetative cover for the former landfill area. The primary objective of the soil cover would be to prevent direct contact with the landfill material. To construct the soil cover, the former landfill area would first be cleared of large scrap steel and debris that currently extends above the ground surface and would detrimentally affect the soil cover installation process. Trees and any brushy vegetation currently present in the project area would be cut to grade and removed. Significant localized depressions in the project area would be graded as necessary via the addition of fill from on-site areas, and the ground surface, including any remaining surface debris, would be prepared for the soil cover by proof-rolling with tracked equipment. Care would be taken during these activities to avoid disturbing the subsurface landfill materials, to the extent possible.

Following completion of the clearing and site preparation activities, the existing monitoring wells would be permanently removed and abandoned, a marker barrier layer consisting of a geotextile or similar material would be installed over the entire OU1 area to clearly mark the soil cover/ landfill interface and serve as a deterrent to excavation. The soil cover would then be placed over the entire former landfill area. Non-specific native soils common to the surrounding area will be used for construction of the soil cover. The soils would be placed in a single loose lift. The disturbed area would be seeded and mulched/ fertilized to minimize both short- term and long- term erosion effects.

Monthly inspections will be performed until vegetation is established as determined by U.S. EPA in consultation with OEPA. A long-term (30-year) maintenance program is part of this alternative. The O&M Plan may be altered upon U.S. EPA's approval.

Institutional controls in the form of deed restrictions would also be implemented to prohibit any inappropriate future use of the former landfill area, to prohibit any future disturbance of the former landfill area/landfill mass, and to prohibit the use of groundwater in the former landfill area.

OU2 Alternative 2 from the EE/CA consists of the following: A two- foot thickness of native soil and a vegetative cover for the OU2 area. The primary objective of the soil cover would be to prevent direct contact with the elevated concentrations of lead present in surface soil in this area of the Site. To construct the soil cover, the area would first be cleared of large scrap steel and

debris that currently extends above the ground surface and would detrimentally affect the soil cover installation process. Trees and any brushy vegetation currently present in the project area would be cut to grade and removed. Significant localized depressions in the project area would be graded as necessary via the addition of fill from on-site areas, and the ground surface, including any remaining surface debris, would be prepared for the soil cover by proof-rolling with tracked equipment.

Following completion of the ground surface preparation activities, a marker barrier layer consisting of a geotextile or similar material would be installed over the entire OU2 area to clearly mark the soil cover/ landfill interface and serve as a deterrent to excavation. Non-specific native soils common to the surrounding area will be used for construction of the soil cover. These generic soils would be placed as a single loose lift. The disturbed area would be seeded and mulched/ fertilized to minimize both short-term and long-term erosion effects.

Monthly inspections will be performed until vegetation is established as determined by U.S. EPA in consultation with OEPA. A long-term (30-year) maintenance program is part of this alternative. The O&M Plan may be altered upon U.S. EPA's approval.

Institutional controls in the form of deed restrictions would also be implemented to prohibit any inappropriate future use of the area, to prohibit any future disturbance of the area, and to prohibit the use of groundwater in the former area.

The response actions described in this action memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at BW which pose an imminent and substantial endangerment to human health and the environment. These response actions do not impose a burden on affected property. In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 117, U.S. EPA issued the EE/CA for public comment in February 2008, and established a public comment period from February 11, 2008 to March 12, 2008, to allow interested parties to comment on the EE/CA. The Responsiveness Summary (Attachment III) documents the U.S. EPA's response to comments received during the comment period. These comments were evaluated prior to, and were considered in the determination of, the non-time critical removal action for the Site.

2. Contribution to Remedial Performance

The proposed non-time critical removal action is expected to significantly reduce the long-term threats associated with the BW Site, including the threats of ingestion of, and direct contact with the hazardous substance (lead) at the Site. There is no groundwater component to this remedy because the groundwater is not contaminated.

3. Description of Alternative Technologies

The EE/CA evaluated based upon their relative technological and cost attractiveness, only three technologies for the Site, access control, an engineered barrier or cap and excavation and disposal. The EE/CA evaluated based upon their relative technological and cost attractiveness, the following removal action technologies:

1. Soil Cover
2. Hazardous Waste Caps

3. Excavation and Off-Site Landfilling

4. Engineering Evaluation/Cost Analysis (EE/CA)

As noted in Section II.B.2, an EE/CA was released by U.S. EPA in February of 2008. When evaluating the most appropriate response for a site, an EE/CA must consider the criteria of effectiveness, implementability and cost. Based upon these criteria, sampling results and the SRE, a 1 foot soil cover is the preferred Alternative for OU1 and a 2 foot soil cover is the preferred Alternative for OU2. Remediation of the OU2 Site area will be to 1800 ppm, lead, based on the Ohio VAP industrial land use generic direct contact standard of 1,800 mg/kg.

The soil cover alternatives reduce human health risk by creating a barrier that eliminates human health exposure if properly maintained. The human health risks eliminated by this alternative are direct contact, and ingestion of lead. Because the cost of these two alternatives is \$2.9 million and the cost of Excavation and Removal is \$17.8 million, the soil covers alternative is clearly more cost-effective. Furthermore, excavation and hauling of the contamination from the Site would significantly disrupt the local neighborhood due to excessive truck traffic and other construction impacts.

5. Applicable or Relevant and Appropriate Requirements (ARARs)

Pursuant to Section 300.415 (i) of the NCP, the proposed action will comply with Federal and State ARARs to the extent practicable considering the exigencies of the situation. A complete list of potential ARARs for the Site is provided in Table 4-1 of the EE/CA.

6. Project Schedule

Design and contractor procurement for the non-time critical removal action are expected to take approximately 12 months. The primary components of the non-time critical removal action are expected to be installed during approximately one six-month construction season.

7. Post-Removal Site Control

Consistent with Section 300.415 (l) of the NCP, all required post-removal site control activities required by the removal action will be provided for under U.S. EPA and OEPA oversight.

B. Estimated Costs

OU 1-2 Soil Cover

Design	\$ 211,800
Construction	
- Soil Cover	\$ 850,500
- Site Work	\$ 561,500
- CM/CQA/Eng.	\$ 247,100
O&M (30 yr PW)	\$ 28,600
Contingency	\$ <u>353,000</u>
	\$2,252,500

OU 2-2 Soil Cover

Design	\$ 66,019
Construction	
- Soil Cover	\$ 262,850
- Site Work	\$ 89,250
- CM/CQA/Eng.	\$ 79,223
O&M (30 yr PW)	\$ 23,400
Contingency	\$ <u>109,084</u>
	\$ 608,766

The response actions described in this memorandum directly address the actual or threatened releases of hazardous substances, pollutants, or contaminants at the Site which may pose an imminent and substantial endangerment to public health, welfare, or the environment. This response action does not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

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

If the proposed action is not taken or delayed, human and ecological receptors will continue to be exposed to landfill materials, including low levels of lead.

VII. OUTSTANDING POLICY ISSUES

This response action implicates no outstanding policy issues.

VIII. ENFORCEMENT

For administrative purposes, information concerning the confidential enforcement strategy for this Site is contained in the Enforcement Confidential Addendum (Attachment II).

IX. RECOMMENDATION

This decision document represents the selected non-time critical removal action for the BW Site, located in Copley, Ohio. This decision document was developed in accordance with CERCLA as amended by SARA; the selected response action is not inconsistent with the NCP. This decision is based on the Administrative Record for the Site. Attachment IV identifies the items that comprise the Administrative Record, upon which the selection of the non-time critical removal action is based.

Conditions at the BW Site meet the NCP Section 300.415(b) (2) criteria for a non-time critical removal. I recommend your approval of the proposed removal action.

APPROVE: Richard C. Karl Date 5-23-08
Richard C. Karl, Director
Superfund Division

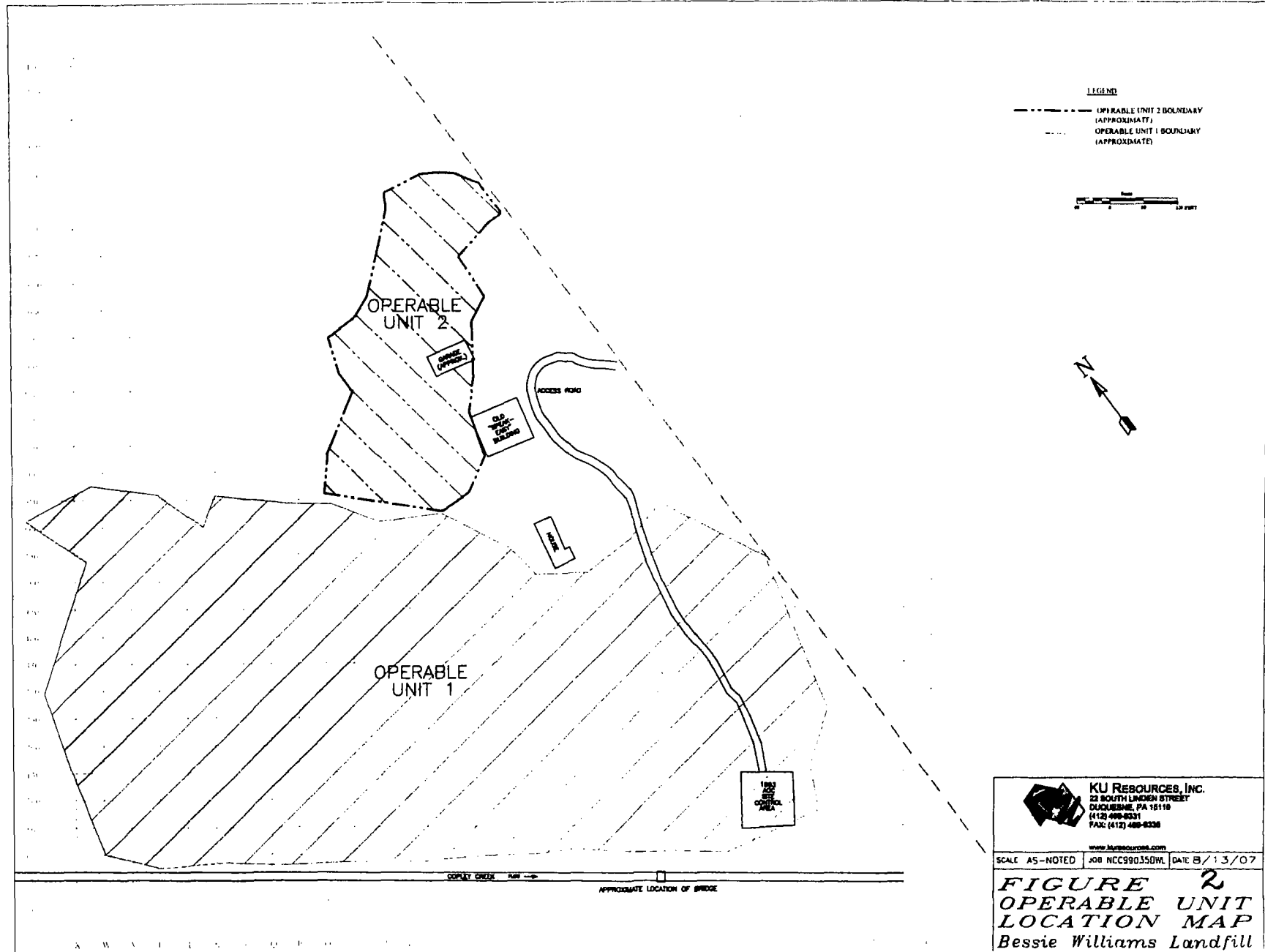
DISAPPROVE: _____ Date _____
Richard C. Karl, Director
Superfund Division

Attachments:

- I. Site Location Figures
- II. Enforcement Confidential Addendum
- III. Responsiveness Summary
- IV. Administrative Record Index

cc: Kevin Mould, U.S. EPA, OERR
D. Henne, U.S. DOI
Lawrence Antonelli, Ohio EPA

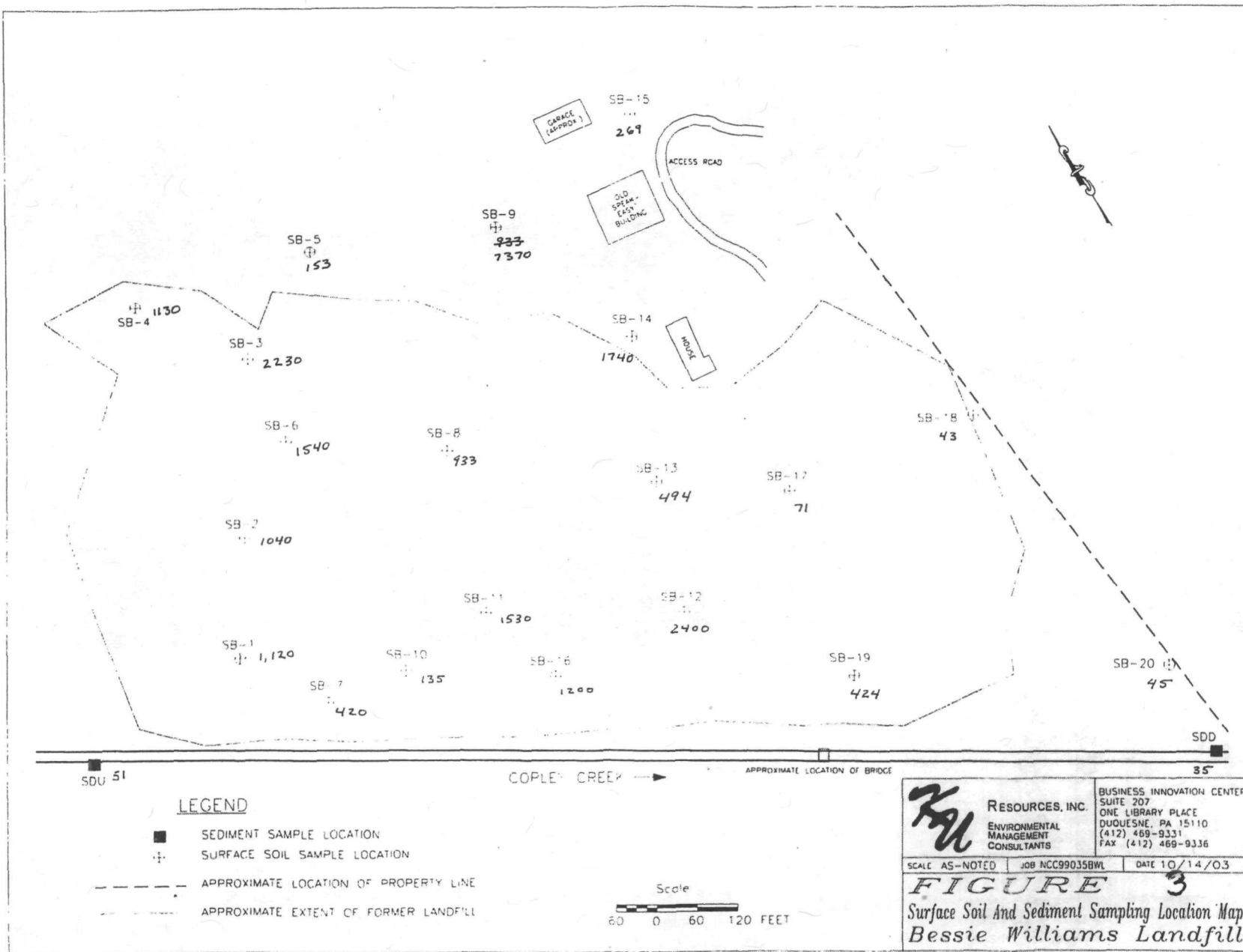
ATTACHMENT I

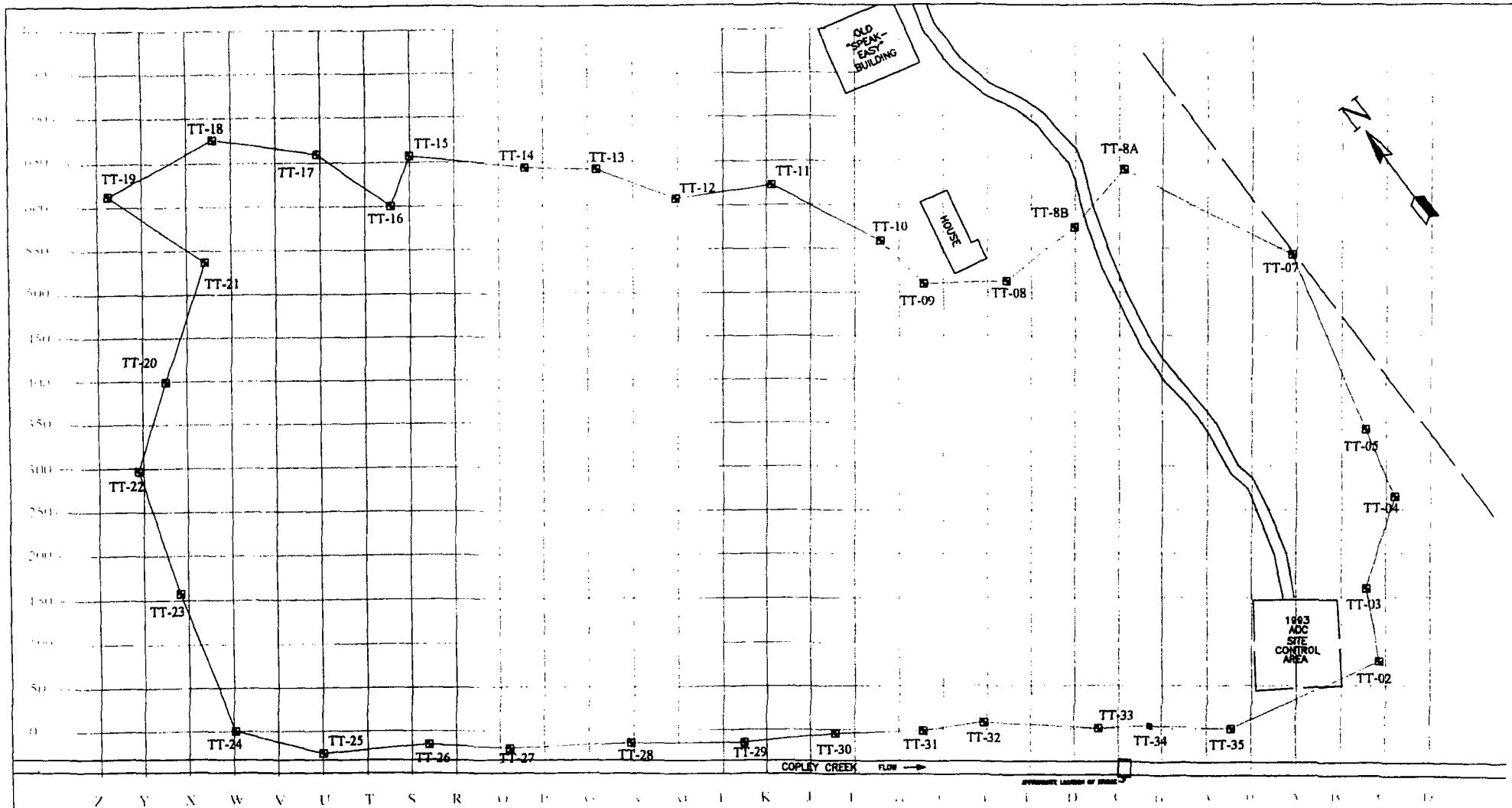



KU RESOURCES, INC.
 22 SOUTH LINDEN STREET
 DUKESBORO, PA 16118
 (412) 488-8331
 FAX: (412) 488-8338
www.kuresources.com

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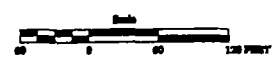
FIGURE 2
OPERABLE UNIT
LOCATION MAP
 Bessie Williams Landfill





Z Y X W V U T S R O P Q A N K J I H G F E D C B A P A R V D

- LEGEND**
- APPROXIMATE TEST TRENCH LOCATION
 - APPROXIMATE LOCATION OF PROPERTY LINE
 - - - APPROXIMATE LIMIT OF FORMER LANDFILL



 <p>KU RESOURCES, INC. 32 SOUTH LONDON STREET DUNELAND, PA 19110 (610) 488-0761 FAX: (610) 488-0880</p> <p>www.kuresources.com</p>		
SCALE: AS-NOTED	JOB: NCC99035BWL	DATE: 8/17/07

FIGURE 5
TEST TRENCH
LOCATION MAP
Bessie Williams Landfill

ATTACHMENT II

ATTACHMENT III

ATTACHMENT III

RESPONSIVENESS SUMMARY

RESPONSE TO COMMENTS ON U.S. EPA'S PROPOSED RESPONSE ACTION FOR BESSIE WILLIAMS SITE, COPLEY, OHIO

The public comment period for U.S. EPA's proposed response action at the Bessie Williams Site (BW) opened on February 11, 2008 and closed on March 12, 2008. A public meeting was held on March 4, 2008 to discuss the results of the Engineering Evaluation/ Cost Analysis (EE/CA) document and U.S. EPA's proposed response action to the public and the Copley Township Board of Trustees.

U.S. EPA received a total of two sets of written comments during the public comment period. No oral comments were received at the public meeting. This responsiveness summary addresses these comments. Each response is divided into two portions, a summary of the comment and a response to the comment.

COMMENT: I represent the landowner in this process as a land broker. We have been speaking with many, many folks about this site. Wetland mitigation banking has been a thought, along with possible vegetable farming, and various other conservation based uses.

RESPONSE: U.S. EPA acknowledges and supports the fact that the site has potential for reuse with regard to wetland mitigation and other conservation based uses, although vegetable farming would be prohibited through institutional controls due to the fact that vegetables uptake lead in soil and would pose a risk to future consumers.

COMMENT: So the Site will be covered up by more dirt? How does that fix anything?

RESPONSE: The proposed non-time critical removal action is expected to significantly reduce the long-term threats associated with the BW Site, including the threats of ingestion of, and direct contact with the hazardous substance (lead) by placing soil covers on both operable units with vegetative covers. There is no groundwater component to this remedy because the groundwater has not been contaminated by the lead's presence.

Because the cost of the two alternatives presented in the EE/CA, are \$2.9 million for the soil covers and \$17.8 million for excavation and removal, the soil covers alternative is clearly more cost-effective. Furthermore, excavation and hauling of the contamination from the Site would significantly disrupt the local neighborhood due to excessive truck traffic and other construction impacts.

ATTACHMENT IV



ATTACHMENT IV

U.S. ENVIRONMENTAL PROTECTION AGENCY REMOVAL ACTION

ADMINISTRATIVE RECORD FOR BESSIE WILLIAMS LANDFILL SITE COPLEY, OHIO

NOVEMBER 19, 1993

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	07/28/92	Calland, D., Babst, Calland, Clements and Zommir	Williams, R., Ohio EPA	Report Re: the 1991 Investigation of the B. Williams Property, Prepared by Keystone Environmental Resources, Inc.	313
2	07/21/93	Pfundheller, J., U.S. EPA	Spangler, K., Ecology & Environment	Site Assessment	39
3	10/08/93	Muno, W., U.S. EPA	Novacor Chemical, Inc.	Administrative Order on Consent	17
UPDATE #2 OCTOBER 17, 1994					
1	03/01/89	U.S. EPA/ OERR	U.S. EPA	Risk Assessment Guidance for Superfund, Volume II: Environmental Evaluation Manual (INTERIM FINAL) (EPA 540/1-89/001)	63
2	08/01/89	U.S. EPA/ OSWER	U.S. EPA	CERCLA Compliance with Other Laws Manual, Part II: Clean Air Act and Other Environmental Statutes and State Requirements (OSWER Directive 9234.1-02, EPA 540/G-89/009)	175
3	12/01/89	U.S. EPA/ OERR	U.S. EPA	Risk Assessment Guidance for Superfund, Volume I; Human Health Evaluation Manual, Part A (INTERIM FINAL) (EPA 540/1-89/002)	286

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
4	04/01/90	U.S. EPA/ OERR	U.S. EPA	Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties (INTERIM FINAL) (EPA 540/G-90/001)	57
5	05/01/90	U.S. EPA/ OSWER	U.S. EPA	Quick Reference Fact Sheet: A Guide to Developing Superfund Records of Decision (OSWER Directive 9335.3-02FS-1)	4
6	08/01/90	U.S. EPA/ OERR	U.S. EPA	Guidance on Expediting Remedial Design and Remedial Action (EPA 540/G-90/006)	51
7	09/01/90	U.S. EPA/ OSWER	U.S. EPA	Quick Reference Fact Sheet: Streamlining the RI/FS for CERCLA Municipal Landfill Sites (OSWER Directive 9355.3-11FS)	4
8	11/01/90	U.S. EPA/ OSWER/ORD	U.S. EPA	The Superfund Innovative Technology Evaluation Program: Technology Profiles (EPA 540/5-90/006)	161
9	02/01/90	U.S. EPA OERR	U.S. EPA	Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites (EPA 540/P-91/001)	305
10	06/01/92	U.S. EPA/ OERR	U.S. EPA	Standard Operating Safety Guides (Publication 9285.1-03, PB 92-963414)	175
11	11/01/92	U.S. EPA/ OSWER	U.S. EPA	Intermittent Bulletin (Vol. 1, No. 4): The Superfund Accelerated Cleanup Model (SACM) (Publication 9203.1-021)	1
12	12/01/92	U.S. EPA/ OSWER	U.S. EPA	Intermittent Bulletin (Vol. 1, No. 11): Status of Key SACM Program Management Issues, Interim Guidance (Publication 9203.1-051)	4

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
13	12/01/92	U.S. EPA/ OSWER	U.S. EPA	Intermittent Bulletin (Vol. 1, No. 2): Early Action and Long Term Action Under SACM, Interim Guidance (Publication 9203.1-051)	4
14	12/01/02	U.S. EPA OSWER	U.S. EPA	Intermittent Bulletin (Vol. 1, No. 3): Enforcement Under SACM, Interim Guidance (Publication 9203.1-051)	5
15	12/01/92	U.S. EPA OSWER	U.S. EPA	Intermittent Bulletin (Vol. 1, No. 4): Assessing Sites Under SACM, Interim Guidance (Publication 9203.0-051)	3
16	05/01/93	U.S. EPA/ OERR	U.S. EPA	Guidance for Scoping the Remedial Design (OSWER Directive 9355.0-43, EPA 540-F-93-026, PB 93-963332)	124
17	08/01/93	U.S. EPA/ OSWER	U.S. EPA	Guidance on Conducting Non Time Critical Removal Actions Under CERCLA (OSWER Directive 9360.0-32, EPA 540-R-93-057, PB 93-963402)	66
18	09/01/93	U.S. EPA/ OSWER	U.S. EPA	Guidance for Evaluating the Technical Impracticability of Ground Water Restoration (INTERIM FINAL) (OSWER Directive 9234.2.-25)	34
19	09/01/93	U.S. EPA/ OSWER	U.S. EPA	Quick Reference Fact Sheet: Draft Soil Screening Level Guidance	12
20	09/01/93	U.S. EPA/ OSWER	U.S. EPA	Quick Reference Fact Sheet: Presumptive Remedies, Policy and Procedures (OSWER Directive 9355.0-47 FS, EPA 540-F-93-047, PB 93-963345)	8

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
21	09/01/93	U.S. EPA/ OSWER	U.S. EPA	Quick Reference Fact Sheet: Remedy for CERCLA Municipal Landfill Sites (OSWER Directive 9355.0-49S, EPA 540-F-93-035, PB 93-963339)	14
22	09/01/93	U.S. EPA/ Region 5	U.S. EPA	Superfund Accelerated Cleanup Model: Region 5 Process (Vol. 1, No. 1)	3
23	10/01/93	U.S. EPA/ Region 5	U.S. EPA	Superfund Accelerated Cleanup Model: Integrated Assessments (Vol. 1, No. 3)	2
24	10/01/93	U.S. EPA/ Region 5	U.S. EPA	Superfund Accelerated Cleanup Model: Qualitative Ecological Risk Assessments (Vol. 1, No. 4)	3
25	10/01/93	U.S. EPA/ Region 5	U.S. EPA	Superfund Accelerated Cleanup Model: Regional Decision Team (Vol. 1, No. 2)	2

UPDATE #3
NOVEMBER 3, 1994

1	05/28/92	Williams, R., Ohio EPA	Dirden, H., Akron Resident	Letter: Site Information w/ Attached Narrative Portion of the Preliminary Assessment	9
2	09/29/92	Princis, B., Ohio EPA	Griffin, J., U.S. EPA	Letter Transmitting Attached August 14, 1972 Preliminary Assessment	9

UPDATE #4
MAY 5, 2008

1	10/01/07	KU Resources, Inc.	Nova Chemicals, Inc. and Millennium Holdings, LLC	Engineering Evaluation/ Cost Analysis Report for the Bessie Williams Landfill Site	1194
2	02/07/08	Akron Beacon Journal	Public	U.S. EPA Public Notice: Acceptance of Public Comments on the Bessie Williams Landfill EE/CA for Soil Cleanup	1
3	02/23/08	Concerned Citizen	Pastor, S, U.S. EPA	E-Mail Transmission re: Public Comment on the Bessie Williams Landfill Site	1

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
4	02/24/08	Harris, M., Colliers Ostendorf- Morris	Pastor, S., U.S. EPA	E-Mail Transmission re: Public Comment on the Bessie Williams Landfill Site	1
5	03/19/08	U.S. EPA	Public	Region 5 Cleanup Sites: Background and Site Update for the Bessie Williams Landfill Site	2
UPDATE #5 MAY 6, 2008					
1	00/00/00	Williams, T., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum: Request for a Non-Time Critical Removal Action at the Bessie Williams Site (PENDING)	