UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION III

STATEMENT OF BASIS

Beazer East, Inc.
(formerly Koppers Company, Inc.)
15 Plum Street
Verona, Pennsylvania 15147

EPA ID NO. PAD980554950

Prepared by
Office of Remediation
Land and Chemicals Division
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List of Acronyms

AR	Administrative Record
BGS	Below Ground Surface
EI	Environmental Indicator
EPA	Environmental Protection Agency
FDRTC	Final Decision and Response to Comments
GPRA	Government Performance and Results Act
HSWA	Hazardous and Solid Waste Amendments
IC	Institutional Control
MCL	Maximum Contaminant Level
PCB	Polychlorinated Biphenyl
RCRA	Resource Conservation and Recovery Act
SB	Statement of Basis
SVOC	Semi-Volatile Organic Compound
TSCA	Toxic Substances Control Act
UECA	Pennsylvania Uniform Environmental Covenants Act
VOC	Volatile Organic Compound

Section 1: Introduction

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) to solicit public comment on its proposed remedy for the Beazer East, Inc. (formerly Koppers Company, Inc.) facility located at 15 Plum Street, Verona, Pennsylvania (Facility or Site).

In developing the proposed remedy, EPA relied on the Pennsylvania Department of Environment Protection's (PADEP) Land Recycling Program's (Act 2 Program) January 17, 1997 approval of the site investigation and cleanup that requires the continual maintenance of the asphalt cap above the coal tar layer and the concrete capsulation of polychlorinated biphenyl (PCB) contamination within the trenches and sumps of Building 6. EPA's proposed remedy also requires the implementation of land and groundwater use restrictions through institutional controls (ICs). ICs are non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination and/or protect the integrity of the remedy by limiting land or resource use. EPA proposes to implement the final remedy for the Facility through an enforceable document such as an order, agreement and/or environmental covenant

The Facility is subject to the Corrective Action Program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901 to 6992k. The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have been investigated and that all releases of hazardous waste and hazardous constituents have been remediated. The Commonwealth of Pennsylvania (the Commonwealth) is not authorized for the Corrective Action program under Section 3006 of RCRA. Therefore, EPA retains primary authority in the Commonwealth for the Corrective Action Program.

The Administrative Record (AR) for the Facility contains all documents, including data and quality assurance information, on which EPA's proposed remedy is based. See Section 8, Public Participation, for information on how you may review the AR. Information on the Corrective Action Program as well as a fact sheet for the Facility can be found by navigating through the EPA website http://www.epa.gov/reg3wcmd/correctiveaction.htm.

Section 2: Facility Background

The Site is approximately 10 acres and is located in Verona, PA. It is bordered on the northwest and northeast sides by Plum Creek, and on the south by Plum Street, as shown in Figure 1 - Facility Map. The facility is located in a mixed residential and industrial area. Residential neighborhoods are located approximately 700 feet to 1,000 feet to the north, west, and south of the Facility. Plum Creek flows westward past the site and discharges in to the Allegheny River approximately three quarters of a mile to the west.

In 1915, the Facility was an asphalt production plant until 1951 when the Koppers Company, Inc. (Koppers) acquired the property and converted it into a research facility known as

the Verona Science and Technology Center. The Center consisted of laboratories, pilot plants, administrative buildings, and support structures. It was used for research and development work in coal and coke, adhesives, protective coatings, pitch products (waterproofing), roofing systems, tar and other industrial products. Laboratory and pilot plant work was conducted on a daily basis and generated various types of waste. The nature of the "solid waste" generated was dependent upon the current research and development projects. All generated hazardous wastes were stored in designated storage areas for less than 90 days and shipped offsite for disposal. Research and development operations ceased in the mid-1980's. Several buildings and operations were closed under PADEP. In 1988, the site was secured, locked and remained vacant until 1996 when it was sold to Pearson, Inc..

In 1990, Koppers Company, Inc. changed its name to Beazer East, Inc. (Beazer). In 1996 and with the intent of selling the property to Pearson Inc., Beazer filed a Notice of Intent to Remediate (NIR) under the Act 2 Program to investigate and remediate the Site to site-specific standards for nonresidential reuse of the property. In January 1997, PADEP issued an approval for the Final Site Characterization, Cleanup Plan and Remediation Report and stated that no further action is required. As a condition of the approval, the post remediation care of the asphalt cover over the coal tar layer and the concrete encapsulation of the residual PCB contamination in Building 6 were incorporated into the deed of the property. Subsequently, PADEP issued the Facility a release of liability under the PADEP Act 2 Program.

Pearson, Inc., a firm engaged in light industrial manufacturing, currently owns the property. Pearson, Inc. leases the majority of the site to the Aloma Shim and Manufacturing Company, which Pearson, Inc. also co-owns. The Aloma Shim and Manufacturing Company's manufactures precision custom shims, fabricated parts, aloma shims, shim kits, alignment devices, and accessories. The remaining smaller parcels of the property are leased to various smaller commercial firms.

Section 3: Summary of Environmental Investigations

Pennsylvania's Land Recycling Program (Act 2 Program)

In 1996, Beazer East, Inc. filed a Notice of Intent to Remediate (NIR) under the PADEP Act 2 Program to investigate and remediate the Site to site-specific standards for nonresidential reuse of the property. As part of the investigation Beazer conducted a Phase I Environment Site Assessment that included a record review and site reconnaissance to evaluate the history and the conditions of the Site. The Phase I preliminary environmental assessment did not identify any past operations at the site that would have significantly impacted the environment or pose a human health exposure risks. Subsequently, Beazer conducted a Phase II Environmental Site Assessment that consisted of groundwater, soils, and sediment sampling to determine and confirm the environmental impact of past operations at the Site.

The soil investigation targeted volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total petroleum hydrocarbons (TPH), heavy metals and total cyanide. A total of eighteen soil borings (11 deep, 4 shallow, 3 had borings) were advanced at various

locations where chemicals and/or raw materials were formerly handled on a regular basis. The soil investigation identified a subsurface layer of coal tar material located in the northern end of the Facility. None of the levels of constituents associated with coal tar were detected above the PADEP direct contact for non-residential soil standards. The subsurface layer of coal tar appears to be isolated and immobile. The coal tar constituents are highly insoluble in water and no evidence of leaching was identified. Groundwater samples collected from below the coal tar layer demonstrated that groundwater had not been impacted.

As a precaution, Beazer installed an impermeable asphalt cap above the coal tar layer to eliminate direct exposures and to prevent water infiltration and potential leaching of the coal tar constituents into groundwater. Soil sampling results for organics, heavy metals and total cyanide were below the PADEP non-residential soil standards, which are consistent with EPA Regional Screening Levels (RSLs).

Several groundwater monitoring wells were installed upgradient and downgradient of the Facility. Groundwater was encountered in the shallow aquifer approximately 9 feet below ground surface (bgs). Groundwater is not the source of water supply in the area. Oakmont Water Authority supplies public water to the Facility and the surrounding areas and draws its water from the nearby Allegheny River. Levels of organics, heavy metals and total cyanide were not detected. Groundwater quality at the Facility has not been impacted from past operations.

Sediment samples were collected along Plum Creek, which borders the northwest and northeast sides of the Facility. The groundwater in the shallow aquifer discharges to the Creek. No VOCs, SVOCs, and heavy metals were detected in significant concentration in any of the Plum Creek sediment samples. Based on the results, PADEP determined that no further action at Plum Creek was warranted.

Polychlorinated biphenyls (PCBs) were detected in the sludge materials during the cleanout of the trenches and sumps in Building 6. The sludge materials and adhered soils were removed and shipped offsite for disposal. Subsequently, the trenches and sumps were cleaned with a PCBs specific cleaning solution to remove residual PCB contamination entrenched in the concrete. After several unsuccessful attempts to remove residual PCB from the concrete, the residual was left in place and capped. The trenches and sumps were lined with plastic sheeting to prevent potential leaching of PCBs, and filled with several feet of concrete to eliminate any potential pathway of exposures. A deed restriction was placed on the property that requires the preservation of the concrete cap that encapsulates the residual PCB contamination.

In January 1997, PADEP issued an approval for the Final Site Characterization, Cleanup Plan and Remediation Report and stated that no further action is required. As a condition of the approval, PADEP requires that the post remediation care of the asphalt cover over the coal tar layer and the concrete encapsulation of the residual PCB contamination in Building 6 be incorporated into the deed of the property.

Environmental Indicators

Under the Government Performance and Results Act (GPRA), EPA has set national goals to address RCRA Corrective Action facilities. Under the GPRA, EPA evaluates two key environmental cleanup indicators for each facility: (1) Current Human Exposures Under Control and (2) Migration of Contaminated Groundwater Under Control. On May 2, 2016 EPA determined that both environmental indicators had been met. These approved environmental indicator determinations are available at:

http://www.epa.gov/reg3wcmd/ca/pa/pdf/pad980554950.pdf.

Section 4: Corrective Action Objectives

EPA's Corrective Action Objectives for the specific environmental media at the Facility are the following:

A. Subsurface Soils

EPA's corrective action objective for subsurface soils is to prevent exposure to the coal tar layer remaining in the subsurface soils located in the northern end of the Facility.

B. Groundwater

The subsurface coal tar layer does not impact groundwater. The layer is immobile and consists of constituents that are highly insoluble in water. Nonetheless, EPA's Corrective Action Objective for groundwater at the Facility is a precautionary measure to prevent any potential exposures to groundwater that could remotely be impacted by the constituents in the subsurface coal tar layer.

C. PCB Residual Contamination

EPA's corrective action objective for the residual PCB contamination in Building 6 is to prevent exposure to residual PCB remaining in the trenches and sumps.

Section 5: Proposed Remedy

Under this proposed remedy, some contaminants remain in the subsurface soil and in Building 6 at the Facility above levels appropriate for residential uses. EPA's proposed remedy requires land and groundwater use restrictions and the compliance with and maintenance of the asphalt cap above the subsurface coal tar layer and the concrete cap over the former trenches and sumps in Building 6. EPA proposes to implement land and groundwater use restrictions and maintenance of the asphalt and concrete caps to prevent human exposure to contaminants at the Facility through an enforceable institutional control such as a permit, order, or environmental covenant.

A. Subsurface Soils

Because coal tar remains in subsurface soils in the northern end of the Facility, this proposed remedy requires that the integrity of the asphalt cap be maintained and the Facility use must be restricted to non-residential.

B. Groundwater

Although the subsurface coal tar layer is expected to remain immobile and not expected to impact the groundwater directly beneath, groundwater use restrictions will be applied at the Site as a precautionary measure. Groundwater use restrictions will be implemented through ICs to restrict onsite groundwater use to non-potable purposes only.

C. PCB Residual Contamination

Residual PCB contamination is left in place and capped in the former trenches and sumps in Building 6. EPA's proposed remedy requires the integrity of the concrete cap be maintained in Building 6 and the Facility use must be restricted to non-residential. The proposed remedy complies with Toxic Substances Control Act (TSCA) cleanup for PCB.

D. Implementation

EPA proposes that maintaining the integrity of the asphalt and concrete caps and land and groundwater use restrictions for the Facility be implemented through an enforceable IC such as an order, agreement and/or an environmental covenant to be entered pursuant to the Pennsylvania Uniform Environmental Covenants Act, 27 Pa. C.S. Sections 6501-6517, (UECA) and recorded with the deed for the Facility property. Current owners and all subsequent owners will be required to comply with these requirements and restrictions.

Section 6: Evaluation of Proposed Remedy

This section provides a description of the criteria EPA used to evaluate the proposed remedy consistent with EPA guidance. The criteria are applied in two phases. In the first phase, EPA evaluates three remedy threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria.

Threshold Criteria	Evaluation
1. Protect human health and the environment	EPA's proposed remedy is protective of human health and the environment. The primary human health and environmental threats posed by the remaining coal tar layer and residual PCB contamination are direct exposures to the contamination. EPA's proposed remedy requires that the integrity of the asphalt and concrete cap be maintained and the compliance with and maintenance of land and groundwater use restrictions at the Facility.

2. Achieve media cleanup objectives	The levels of coal tar constituents remaining in the subsurface soils are below the PADEP direct contact for non-residential soil standards. After removing sludges containing PCB contamination and several unsuccessful cleansing of the sumps and trenches to remove residual PCB contamination entrenched in the concrete, the PCB contamination was left in place and capped to eliminate any potential pathway of exposure. EPA has determined that residual PCB contamination left in place will not pose a human health or environmental exposure risk. EPA's proposed remedy requires a deed restriction on the property that requires that the integrity of the asphalt and concrete cap be maintained.
3. Remediating the Source of Releases	In all remedy decisions, EPA seeks to eliminate or reduce further releases of hazardous wastes or hazardous constituents that may pose a threat to human health and the environment. The sludges that contain PCB contamination in the sumps and trenches of Building 6 have been removed and properly disposed offsite. Only residual PCB contamination entrenched in the concrete of the sumps and trenches remains. The sumps and trenches have been encapsulated with concrete and the residual PCB contamination entrenched in the concrete does not pose a source for potential releases. The levels of coal tar constituents remaining in the subsurface soils are below the PADEP direct contact for non-residential soil standards. The coal tar layer in the subsurface soil is immobile and does not impact the groundwater. An impermeable asphalt cap is placed over the coal tar layer that eliminates pathway of exposures and prevents water infiltration and potential leaching of the coal tar constituents into the groundwater.
Balancing Criteria	**Evaluation**
4. Long-term effectiveness	The proposed remedy will maintain protection of human health and the environment over time by controlling exposure to contamination remaining in soils and the former trenches and sumps in Building 6. EPA's proposed remedy requires that the integrity of the asphalt and concrete cap be maintained and the compliance with and maintenance of land and groundwater use restrictions at the Facility. EPA anticipates that the land and groundwater use restrictions will be implemented through an environmental covenant to be recorded with the deed for the Facility property. The environmental covenant will run with the land and as such, will be enforceable by EPA and the State against future land owners.
5. Reduction of toxicity, mobility, or volume of the	The proposed remedy reduces the toxicity, mobility or volume of coal tar remaining in the subsurface soils and residual PCB contamination at the Facility. There are no direct exposures to the

Hazardous Constituents	layer of coal tar or the residual PCB contamination. The respective caps for each area of contamination minimize any potential migration of the contamination from its existing location.
6. Short-term effectiveness	EPA's proposed remedy does not involve any additional activities, such as construction or excavation that would pose short-term risks to workers, residents, and the environment. In addition, EPA anticipates that the land and groundwater use restrictions will be fully implemented shortly after the issuance of the Final Decision and Response to Comments (FDRTC).
7. Implementability	EPA's proposed remedy is readily implementable. EPA anticipates that the land and groundwater use restrictions will be fully implemented shortly after the issuance of the FDRTC.
8. Cost	EPA's proposed remedy is cost effective. The cost in implementing ICs at the Facility is minimal.
9. Community Acceptance	EPA will evaluate community acceptance of the proposed remedy during the public comment period for this SB and will describe community acceptance in the FDRTC.
10. State/Support Agency Acceptance	EPA will evaluate State acceptance of the proposed remedy during the public comment period and will describe the State's position in the FDRTC.

Section 7: Financial Assurance

EPA has evaluated whether financial assurance is necessary to implement the proposed remedy as described in Section 5. Given the minimal cost in implementing ICs at the Facility, EPA is proposing that financial assurance not be required

Section 8: Public Participation

Before EPA makes a final decision on its proposal for the Facility, the public may participate in the proposed remedy selection process by reviewing this SB and documents contained in the Administrative Record (AR) for the Facility. The AR contains all information considered by EPA in reaching this proposed remedy. It is available for public review during normal business hours at:

U.S. EPA Region III
1650 Arch Street
Mail code: 3LC30
Philadelphia, PA 19103
Contact: Mr. Khai Dao

Phone: (215) 814-5467
Fax: (215) 814-3113
Email: dao.khai@epa.gov

and

PADEP Southeast Regional Office
2 E. Main Street
Norristown, PA 19401-4915
Phone: (484) 250-5900

Interested parties are encouraged to review the AR and comment on EPA's proposed remedy. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. You may submit comments by mail, fax, or e-mail to Mr. Khai Dao. EPA will hold a public meeting to discuss this proposed remedy upon request. Requests for a public meeting should be made to Mr. Khai Dao.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrant a modification to the proposed remedy, EPA will modify the proposed remedy or select other alternatives based on such new information and/or public comments. EPA will announce its final remedy and explain the rationale for any changes in the FDRTC. All persons who comment on this proposed remedy will receive a copy of the FDRTC. Others may obtain a copy by contacting Mr. Khai Dao at the address listed above.

6.22.16
Date

John A. Armstead, Director
EPA Region III
Land and Chemicals Division

Section 9: Index to Administrative Record

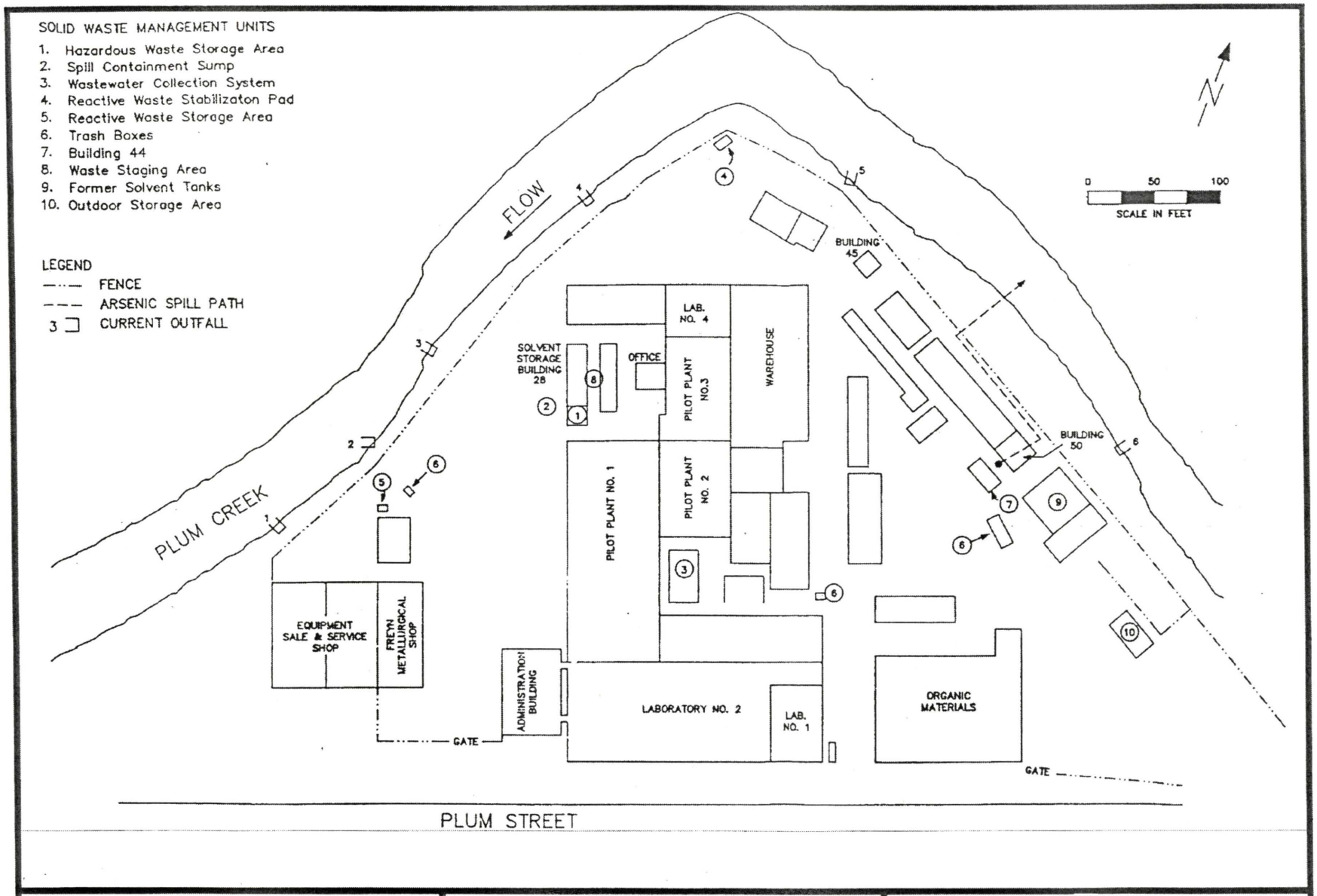
Koppers Science and Technology Center, Final RCRA Facility Assessment Report, prepared by CDM Federal Programs Corp., June 1989

Beazer East, Inc. Phase I Environmental Assessment Report, prepared by Civil & Environmental Consultants, Inc., March 1996.

Beazer East, Inc. Site Characterization, Cleanup Plan and Remediation Final Report, prepared by Civil & Environmental Consultants, Inc., December 1996.

USEPA Koppers Compnay, Inc., Environmental Indicator Inspection Report, prepared by Baker Engineering, July 2010.

Attachments



SCALE: APPROX.1"=100'	DATE:JULY 2010	Baker MICHAEL BAKER JR., INC.
S.O. NO.: 114992	FILE: 114992-KOP_04	MOON TOWNSHIP, PENNSYLVANIA
DSN/DWN:SRF/WJH	CHK: SRF	

FIGURE 1
SITE LAYOUT AND SWMU LOCATION MAP
FORMER KOPPERS COMPANY, INC.
15 PLUM STREET
VERONA, PENNSYLVANIA