



UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION III

STATEMENT OF BASIS

KOPPERS INC. FACILITY

MONTGOMERY, PENNSYLVANIA

PAD 056723265

## **I. 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 facility owned and operated by Koppers Inc. (Koppers) and located at 50 Koppers Lane, just off Route 405 in Montgomery, Lycoming County, Pennsylvania (Facility). EPA's proposed remedy consists of the implementation of a combination of engineering controls (ECs) and institutional controls (ICs) which are designed to minimize the potential for human exposure to contamination and to protect the integrity of the cleanup. This SB highlights key information relied upon by EPA in making its proposed remedy.

The Facility is subject to EPA's 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. §§ 6901 *et seq.* (Corrective Action Program). The Corrective Action Program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up releases of hazardous waste and hazardous constituents that have occurred at their property. The Commonwealth of Pennsylvania (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 IX, Public Participation, for information on how you may review the AR.

## **II. Facility Background**

The Facility currently consists of approximately 109 acres. Previously, the areal extent of the Facility was approximately 164 acres. In June 1989, Koppers sold approximately 56 acres. Industrial operations were, and still are, performed on the remaining approximately 109 acres. In 2008, EPA determined that the approximately 56-acre parcel which was sold was solely used as agricultural land and never utilized as part of the Facility operations. The eastern, southern, and western portions of the Facility are bordered by agricultural land. The Facility is located approximately 2,000 feet from the West Branch of the Susquehanna River. A site location map is attached as Figure 1.

The Facility produces pressure-treated railroad ties, bridge timbers, switch ties, and crossing panels. The Facility was built in 1971 and operated until late 1988 by the Koppers Company, Inc. The Facility was purchased by Koppers Industries, Inc. in December 1988 and continued to operate. Koppers Company, Inc. changed its name in 1990 and is now known as Beazer East, Inc. (Beazer). Beazer retains certain (pre-1988) environmental liability for the Facility. Koppers Industries, Inc. changed its name to Koppers Inc. in February 2003. The Facility is a regulated operating facility that must comply with hazardous waste management regulations. The Facility maintains a Spill Prevention, Control, and Countermeasures plan to address spill responses.

### III. Summary of Environmental Investigation

Environmental assessments, investigations, and remedial activities have been conducted at the Facility since the 1980s. These investigations and remedial activities have been conducted primarily by Beazer as the former owner and operator in cooperation with both the EPA and the Pennsylvania Department of Environmental Protection (PADEP).

Environmental conditions at the Facility were first assessed by EPA in August of 1986 through a RCRA Facility Assessment (RFA). Eight Solid Waste Management Units (SWMUs) were identified as part of the RFA. In 2003, during preparation of an Environmental Indicator (EI) Report, EPA expanded the list of SWMUs at the Facility to include an additional area of concern (AOC). Several of the SWMUs were remediated between 1986 and 2003. The current list of the eight SWMUs and the AOC is as follows:

SWMUs:

Former Container Storage Area  
Former Surface Impoundments  
Drip Tracks I and II  
Former Spray Irrigation Field

Extended Aeration Basin  
Door Pit  
Duck Pond  
Hazardous Waste Storage Area

AOC:

Creosote Unloading Area

Four of the SWMUs were investigated and were found to have no evidence of releases or environmental impacts including the Hazardous Waste Storage Area, the Extended Aeration Basin, the Door Pit, and the Duck Pond. Corrective Action activities were undertaken at four of the SWMUs including the Former Container Storage Area, the Former Surface Impoundments, the Former Spray Irrigation Field, and Drip Tracks I and II. Details regarding the Corrective Action activities for each of these SWMUs and the AOC are as follow:

*Former Surface Impoundments* - Use of the three surface impoundments was discontinued in 1988 and closure was completed by Beazer in accordance with a PADEP-approved RCRA Closure Plan dated October 1, 1987. Removal of free liquids, sludge, a bentonite liner, and sub-surface soils was completed from July-August 1988. Approximately 2,300 tons of stabilized sludge containing hazardous waste (RCRA Hazardous Waste K001), liner material, and soil were removed from the surface impoundments. In September 1989, final closure, including site preparation, backfilling with clean soil, grading, and reseeded was completed. Closure activities were documented in a Construction Closure Documentation Report dated December 1989. Post-closure care of the SWMU and groundwater monitoring were necessary for the closed impoundments. Post-closure groundwater monitoring was initiated at the closed impoundments in 1988. Groundwater monitoring continued until 2006 when analytical results confirmed all constituents were below EPA Region 3 Tapwater Regional Screening Levels.

Beazer submitted a Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) Final Report to PADEP in October of 2006 documenting that the Former Surface Impoundments met Residential Statewide Health Standards (SHSs) for soil and groundwater.

PADEP approved the Final Report for the Former Surface Impoundments on December 4, 2006 and approved the clean closure of the Surface Impoundments on January 9, 2007. As a result of this approval, post-closure care and monitoring are no longer required for this SWMU and the monitoring wells have been abandoned. EPA reviewed and concurred with PADEP's determination.

Former Container Storage Area - The Former Container Storage Area (also known as the CSA) was a concrete secondary containment structure that was in use from 1980 through 1990. Closure activities consisted of removal of all drums, removal of wooden slats and sludge material from the CSA floor, and steam cleaning. Closure of the SWMU was documented in a report dated June 1990 (Closure Documentation Report for Container Storage Facility). On September 14, 1990, the PADEP (then known as the Pennsylvania Department of Environmental Resources) notified Koppers and Beazer that the CSA had been inspected, that closure activities had been performed in accordance with the approved closure plan, and that post-closure care of the SWMU was not required.

Former Spray Irrigation Field - The spray irrigation field (sprayfield) was used for land application of treated effluent from the wastewater treatment system and was in operation from 1972 through 1988. Investigation of the sprayfield was conducted as early as 1972 and included test pitting, well installation, and groundwater monitoring. Use of the sprayfield was discontinued in 1988, and closure of the sprayfield was completed after flushing of all lines with potable water. Groundwater sampling results indicated that all constituents were below EPA Region 3 Tapwater Regional Screening Levels. In 2008 EPA requested additional soil sampling. The analytical results demonstrated that soil constituents are below EPA Region 3 generic industrial soil regional screening levels (IRSLs).

Creosote Unloading Area - During the EI inspection, the Creosote Unloading Area was identified as an area of concern at the Facility. Beazer submitted a work plan to EPA on March 31, 2009 proposing additional investigation. Pursuant to the EPA-approved Work Plan, samples were obtained from this SWMU and compared to both the PADEP Non-Residential (NR) SHSs as well as EPA's IRSLs. Analytical results from one sample location exceeded both the SHSs and IRSLs. In 2010 a streamlined risk assessment was performed and demonstrated that all constituents fell within acceptable EPA risk ranges. EPA, therefore, determined that this SWMU met site-specific risk-based standards. An existing gravel cover will be maintained as an appropriate EC to ensure that there is no direct contact pathway for this area.

Drip Tracks I and II - Regulations regarding wood preserving were promulgated on December 6, 1990 pursuant to 40 CFR Part 265, Subpart W, and the regulation became effective on June 6, 1991. In response to the regulations, 9,000 tons of soil were excavated from the Drip Track I and II areas and disposed offsite (1990-1991). The two drip track areas were upgraded with sub-grade materials and reinforced concrete containment structures to comply with the regulations. No soil samples were taken from the excavation to compare to EPA Regional Screening Levels (RSLs). However, monitoring wells that were installed to monitor the former Surface Impoundments were located downgradient of the Drip Tracks. Groundwater monitoring results demonstrate that there is no evidence that the Drip Tracks are impacting the environment. The drip pad will be closed in accordance with 40 CFR Part 265, Subpart W.

56 Acre Sold Parcel - This approximately 56 acre Parcel was described in the Facility Background section. The Parcel was included in the RCRA Hazardous Waste Permit for the Facility, and, therefore, is subject to RCRA Corrective Action. Further research indicated that this Parcel was solely used as agricultural land and never utilized as part of the Facility's manufacturing operations. EPA found no evidence to reasonably suspect that any media contain Facility-related contaminants above appropriately protective risk-based levels, and, therefore, EPA does not anticipate any further actions under RCRA at the Parcel.

#### **IV. Corrective Action Objectives**

EPA's Corrective Action Objectives for the Facility are the following:

##### **1. Soil**

EPA's Corrective Action Objective for the Facility soils is long term control of exposure to hazardous wastes and constituents remaining in the soils over residential SHSs by requiring the implementation of land use restrictions at the Facility.

##### **2. Groundwater**

EPA's Corrective Action Objective for groundwater at the Facility are to meet drinking water standards established by the Maximum Contaminant Levels (MCLs) promulgated at 40 C.F.R. Part 141 pursuant to Section 1412 of the Safe Drinking Water Act, 42 U.S.C. Section 300g-1. EPA has reviewed all available groundwater monitoring results and has determined that Facility groundwater meets MCLs. Therefore, EPA has determined that no further action is required for Facility groundwater.

#### **V. Proposed Remedy**

EPA is proposing the implementation of a combination of ECs and ICs which are designed to minimize the potential for human exposure to contamination.

##### **1. Engineering Controls**

ECs consist of measures (e.g, caps, treatment systems, etc.) designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants through environmental media. EPA has determined that the existing gravel cover at the Creosote Unloading Area is protective of human health and the environment by limiting direct contact to contaminated media at this Facility.

##### **2. Institutional Controls**

EPA is proposing land use restrictions be established and maintained to restrict the Facility to industrial uses and to require inspection and maintenance of the gravel cover. EPA proposes that

the land use restrictions and inspection requirements be implemented through institutional controls (ICs). ICs are non-engineered enforceable instruments such as administrative 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. Specifically, EPA proposes that the land use restrictions and inspection requirements be implemented through an Environmental Covenant prepared under Pennsylvania's Uniform Environmental Covenants Act, 27 Pa. C.S. §6501 et seq. (UECA).

If the Facility fails to meet and maintain its obligations under the Environmental Covenant, or EPA or PADEP, in its sole discretion, deems that additional ICs are necessary to protect human health or the environment, both agencies have the authority to enforce the Environmental Covenant or require and enforce additional corrective action.

## **VI. Evaluation of EPA's 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 threshold criteria as general goals. In the second phase, for those remedies which meet the threshold criteria, EPA then evaluates seven balancing criteria to determine which proposed alternative provides the best relative combination of attributes.

### **A. Threshold Criteria**

#### **1. Protect Human Health and the Environment**

Koppers has remediated on-site soils to protect human health and the environment for industrial use. Since current and anticipated land use is industrial, controls will be implemented at the Facility to restrict future property uses to ensure that human health and the environment remain protected.

These conditions may become enforceable by PADEP and EPA under an Environmental Covenant and provide long-term assurance that the exposure assumptions used in developing EPA's proposed remedy are not changed.

#### **2. Achieve Media Cleanup Objectives for Soil and Groundwater**

EPA's proposed remedy meets the appropriate cleanup objectives based on current and reasonably anticipated industrial use. Soil contaminant levels after excavation either meet the EPA and PADEP standards or have been demonstrated to be below acceptable industrial risk-based levels. The Administrative Record for this EPA action contains further detail on how these standards were developed.

#### **3. Remediating the Source of Releases**

In all 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 Facility

has remediated the principal sources of releases through a combination of sampling, excavation, and clean closure. In the area where minimal contamination remains, the Creosote Unloading Area, capping effectively eliminates exposure to human receptors thereby preventing any threat to human health or the environment.

## **B. Balancing/Evaluation Criteria**

### **1. Long-Term Effectiveness**

The proposed controls will protect human health and the environment over time by preventing exposure to the hazardous constituent levels remaining in soils. EPA's proposed remedy requires the implementation of, compliance with, and maintenance of land use restrictions at the Facility. The land use restrictions may be implemented through an environmental covenant recorded in the chain of title for the Facility property. The environmental covenant runs with the land and as such will be enforceable against all future land owners.

### **2. Reduction of Toxicity, Mobility, or Volume of the Hazardous Constituents**

The reduction of toxicity, mobility and volume of hazardous constituents at the Facility has been achieved by soil excavation and sampling to confirm that hazardous constituents were removed from the four SWMUs (Container Storage Area, the Former Surface Impoundments, the Former Spray Irrigation Field, and Drip Tracks I and II) identified as requiring Corrective Action. In the Creosote Unloading Area AOC where a minor volume of contamination remains, an existing gravel cover will be maintained as an appropriate EC. The EC will prevent direct contact to contaminants through capping and will effectively prevent exposure to human receptors thereby eliminating any threat.

### **3. Short-Term Effectiveness**

EPA's proposed final 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 use restrictions will be fully implemented shortly after the issuance of the Final Decision and Response to Comments.

### **4. Implementability**

EPA's proposed remedy incorporates work already completed and the land use restrictions are readily implementable. Therefore, EPA does not anticipate any regulatory constraints in the implementation of its proposed remedy.

### **5. Cost**

Active remediation is complete and the costs to implement the land use restrictions are minimal. The anticipated environmental covenant reporting requirements and maintenance of the existing gravel cover represent the only remaining costs.

## **6. Community Acceptance**

EPA will contact the Montgomery, PA township manager and explain this proposed remedy. A public notice and opportunity for public meeting to discuss this proposed remedy will be announced via publication of the proposed remedy in a local newspaper.

EPA will evaluate community acceptance of the proposed remedy during the public comment period, and this will be described in the Final Decision and Response to Comments.

## **7. State/Support Agency Acceptance**

EPA will evaluate State acceptance based on comments received from PADEP during the public comment period and will be described in the Final Decision and Response to Comments.

## **VII. Environmental Indicators**

EPA sets national goals to measure progress toward meeting the nation's major environmental goals. For Corrective Action, EPA evaluates two key environmental indicators for each facility: (1) current human exposures under control and (2) migration of contaminated groundwater under control. The Facility met these indicators on November 16, 2010.

## **VIII. Financial Assurance**

EPA has evaluated whether financial assurance for corrective action is necessary to implement EPA's proposed remedy at the Facility. Given that EPA's proposed remedy does not require any further engineering actions to remediate soil contamination at this time and given that the costs of implementing institutional controls at the Facility will be minimal, EPA is proposing that no financial assurance be required.

## **IX. Public Participation**

Before EPA makes a final decision on its proposal for the Facility, the public may participate in the 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  
Philadelphia, PA 19103  
Contact: Mr. Kevin Bilash (3LC30)  
Phone: (215) 814-2796  
Fax: (215) 814-3113  
Email: [bilash.kevin@epa.gov](mailto:bilash.kevin@epa.gov)



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. Kevin Bilash. EPA will hold a public meeting to discuss this proposed remedy upon request. Requests for a public meeting should be made to Mr. Kevin Bilash.

EPA will respond to all relevant comments received during the comment period. If EPA determines that new information warrants 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 a document entitled the Final Decision and Response to Comments (FDRTC). All persons who comment on this proposed remedy will receive a copy of the FDRTC. Others may obtain a copy by contacting Mr. Kevin Bilash at the address listed above.

Date:

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

Figure 1 – Facility Location Map

## **Index to Administrative Record**

RCRA Facility Assessment Phase II Report, A.T. Kearney, Inc., August 22, 1986.

Closure Documentation Report for Container Storage Facility, Keystone Environmental Resources, Inc., June 1990.

Environmental Indicator Inspection Report for Koppers Susquehanna Plant, 50 Koppers Lane, Montgomery, Pennsylvania, Tetra Tech FW Inc., December 2003.

2005 RCRA Annual Groundwater Monitoring Report, ThermoRetec, February 27, 2006.

Pennsylvania Land Recycling and Environmental Remediation Standards Act (Act 2) Final Report, Closed Surface Impoundment, October 2006

Letter and Compact Disc (CD) to EPA, RE Koppers Inc. CD containing soil and groundwater data, May 7, 2008.

Koppers Inc. Susquehanna Wood Treating Facility (work plan), Key Environmental Inc., March 31, 2009

Soil Sample Summary Report, Key Environmental Inc., September 12, 2009, January 7, 2010 (revised), April 30, 2010 (revised).

Responses to EPA Comments Regarding the September 10, 2009 Soil Sample Summary Report, Key Environmental Inc., January 7, 2010.