



**U.S. ENVIRONMENTAL PROTECTION AGENCY
CORRECTIVE ACTION MANAGEMENT UNIT (CAMU)
PORTION OF THE RESOURCE CONSERVATION AND RECOVERY ACT PERMIT
PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS**

<p>OWNER: Koppers Inc. 436 Seventh Avenue Pittsburgh, PA 15219</p>	<p>OPERATOR: Beazer East, Inc. 1910 Cochran Road Manor Oak One, Suite 200 Pittsburgh, PA 15220</p>	<p>EPA I.D. No. KYD 006 383 392</p>
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Pursuant to the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, 42 USC Section 6901 et seq., and the Hazardous and Solid Waste Amendments (HSWA) of 1984, P.L. 98-616, and regulations promulgated thereunder by the U.S. Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations), this Permit is issued to Koppers Inc. and Beazer East, Inc. (hereafter collectively called "the Permittee"), which own and operate, respectively, a hazardous waste facility located at 198 Fairgrounds Road, Guthrie, Todd County, Kentucky 42234, at latitude N 36° 38' 49" and longitude W 89° 09' 29" (the Facility).

This Permit, in conjunction with the Hazardous Waste Facility Post-Closure and Corrective Action Permit issued by the Commonwealth of Kentucky, constitutes the full RCRA Permit for this Facility. The Permittee shall be required to manage remediation waste generated from corrective action activities in a Corrective Action Management Unit (CAMU) according to the conditions of this Permit and pursuant to the requirements of 40 CFR § 264.551.

The Permittee must comply with all terms and conditions of this Permit. This Permit consists of the conditions contained herein (including those in any appendices) and applicable regulations contained in 40 CFR Parts 260 through 264, 270, and 124 as specified in this Permit, and the statutory requirements of RCRA, as amended by HSWA. Nothing in this Permit shall preclude the Regional Administrator from reviewing and modifying the Permit at any time during its term in accordance with 40 CFR § 270.41.

This Permit is based on the premise that information and reports submitted by the Permittee prior to issuance of this Permit are accurate. Any inaccuracies found in this information or information submitted as required by this Permit may be grounds for termination or modification of this Permit in accordance with 40 CFR § 270.41, § 270.42, and § 270.43 and potential enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

The authority to perform all actions necessary to issue, modify, enforce, or revoke this Permit has been delegated by the Regional Administrator to the Resource Conservation and Restoration (RCR) Division Director.

This Permit is effective _____, and shall remain in effect until _____, unless revoked and reissued, or terminated under 40 CFR § 270.41 and § 270.43 or continued in accordance with 40 CFR § 270.51(a). All obligations for performance of HSWA provisions required under this Permit are in effect until deemed complete by the Regional Administrator.

If any conditions of this Permit are appealed in accordance with 40 CFR § 124.19, the effective date of the conditions determined to be stayed in accordance with 40 CFR § 124.16 shall be determined by final agency action as specified under 40 CFR § 124.19.

G. Alan Farmer, Director
Resource Conservation and Restoration Division

Issue Date

TABLE OF CONTENTS

		<u>40 CFR Regulatory</u>	
		<u>Citation</u>	<u>Page</u>
Cover Page	Permit Authority Permit Duration	Part 124 Part 260 Part 261 Part 264 Part 270	1
Part I	STANDARD CONDITIONS		6
I.A.	Effect of Permit	§ 270.4 § 270.30(g)	6
I.B.	Permit Actions	§ 270.30(f) § 270.41 § 270.42 § 270.43	6
I.C.	Severability § 124.5	§ 124.16 § 270.4(a)	6
I.D.	Duties and Requirements		7
I.D.1.	Duty to Comply	§ 270.30(a)	7
I.D.2.	Duty to Reapply	§ 270.10(h) § 270.30(b)	7
I.D.3.	Corrective Action/Post-Closure Care Obligation for CAMUs	§ 264.101 § 270.1(c) § 270.51	7
I.D.4.	Need to Halt or Reduce Activity Not a Defense	§ 270.30(c)	7
I.D.5.	Duty to Mitigate	§ 270.30(d)	7

40 CFR Regulatory
Citation Page

I.D.6.	Proper Operation and Maintenance	§ 270.30(e)	7
I.D.7.	Duty to Provide Information	§ 270.30(h)	8
I.D.8.	Inspection and Entry	§ 270.30(i)	8
I.D.9.	Monitoring and Records	§ 264.74(b) § 270.30(j)	8
I.D.10.	Reporting Planned Changes	§ 270.30(l)(1)-(2)	9
I.D.11.	Anticipated Noncompliance	§ 270.30(l)(2)	10
I.D.12.	Transfer of Permit	§ 264.12(c) § 270.30(l)(3) § 270.40	10
I.D.13.	Schedules of Compliance	§ 270.33	10
I.D.14.	Twenty-four Hour Reporting	§ 264.56(d) § 270.30(l)(6) § 270.30(h)	10
I.D.15.	Other Noncompliance	§ 270.30(l)(10)	11
I.D.16.	Other Information	§ 270.30(l)(11)	11
I.E.	Signatory Requirements	§ 270.11 § 270.30(k)	11
I.F.	Confidential Information	§ 270.12	12
I.G.	Definitions	Part 124 Part 260 Part 261 Part 264 Part 270 RCRA, as amended	12

40 CFR Regulatory
Citation Page

Part II	CORRECTIVE ACTION MANAGEMENT UNIT (CAMU)	§ 264.551	16
II.A.	Applicability	§ 264.550(b)	16
II.B.	Location and Aerial Configuration of the CAMU	§ 264.551(e)(1)	16
II.C.	CAMU Description	§ 264.551(e)(2)	17
II.D.	CAMU Operation	§ 264.551(e)(2)	17
II.E.	Groundwater Monitoring	§ 264.551(e)(3)	18
II.F.	Post-Closure Care	§ 264.551(e)(4)(iv)	19
II.G.	Cost Estimate for Post-Closure Care and Corrective Action	§ 264.90(a)(2) § 264.101	20
II.H.	Financial Assurance for Post- Closure Care and Corrective Action	§ 264.90(a)(2) § 264.101	20
II.I.	Schedule of Compliance for CAMU	§ 264.551 § 264.101(b)	21

TABLES

Table 1 Groundwater Analytes for the CAMU Groundwater Monitoring System

FIGURES

Figure 1 CAMU Location Map

APPENDICES

APPENDIX A Permit Renewal Application for Hazardous and
Solid Waste Amendments, Corrective Action Management
Unit, June 27, 2013

APPENDIX B CAMU Deed Notice

APPENDIX C Schedule of Compliance

APPENDIX D Cost Estimate and Financial Assurance

PART I - STANDARD CONDITIONS

I.A. EFFECT OF PERMIT

Compliance with this RCRA Permit constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA, except for those requirements not included in the Permit which become effective by statute; are promulgated under 40 CFR Part 268 restricting placement of hazardous waste in or on the land; or are promulgated under 40 CFR Part 264 regarding leak detection systems for new and replacement surface impoundments, waste piles, and Landfill units, and lateral expansions of surface impoundments, waste piles, and Landfill units, as specified in 40 CFR § 270.4. Issuance of this Permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of state or local law or regulations. Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Sections 3008(a), 3008(h), 3004(v), 3008(c), 3007, 3013 or 7003 of RCRA, Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601 *et seq.* (CERCLA), or any other law providing for protection of public health or the environment.

I.B. PERMIT ACTIONS

This Permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR §§ 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any Permit condition.

I.C. SEVERABILITY

As specified in 40 CFR § 124.16, if there is a request for review of this Permit, the contested Permit conditions shall be stayed. Uncontested conditions which are not severable from those contested shall also be stayed together with the contested conditions. All other conditions of the Permit become fully effective and enforceable thirty (30) calendar days after the Regional Administrator notifies the Environmental Appeals Board, the Permittee and all other interested parties of this Permit's contested (and severable) conditions.

I.D. DUTIES AND REQUIREMENTS

I.D.1. Duty to Comply

The Permittee shall comply with all conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

I.D.2. Duty to Reapply

If the Permittee will continue an activity allowed or required by this Permit after the expiration date of this Permit, the Permittee shall submit a complete application for a permit renewal at least one hundred eighty (180) calendar days before this Permit expires, unless permission for a later date has been granted by the Regional Administrator or the Commonwealth of Kentucky, if the Commonwealth of Kentucky has become authorized to administer this Permit.

I.D.3. Corrective Action/Post-Closure Care Obligation for CAMUs

The Permittee is required to continue this Permit for any period necessary to comply with the Corrective Action and post-closure care requirements for CAMUs under 40 CFR Part 264, Subpart S, and Part II of this Permit.

I.D.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

I.D.5. Duty to Mitigate

In the event of noncompliance with the Permit, the Permittee shall take all reasonable steps to minimize Releases of Hazardous Waste or Hazardous Constituents to the environment, and shall carry out such measures as are reasonable to prevent significant adverse effects on human health or the environment.

I.D.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the

Permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the Permit.

I.D.7. **Duty to Provide Information**

The Permittee shall furnish to the Regional Administrator, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this Permit.

I.D.8. **Inspection and Entry**

The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

- a. Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this Permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated, or required under this Permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring Permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

I.D.9. **Monitoring and Records**

- I.D.9.a.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative waste sample to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261, the EPA Region 4 Science and Ecosystems Support Division's Field Branches Quality System and Technical Procedures (Procedures) (most recent version), or an equivalent method approved by the Regional Administrator. Procedures for sampling contaminated media

must be those identified in the EPA Region 4 Procedures, or an equivalent method approved by the Regional Administrator. Laboratory methods must be those specified in the most recent edition of Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846, or an equivalent method approved by the Regional Administrator.

I.D.9.b. The Permittee shall retain at the Facility, as provided for under 40 CFR Part 264, or other appropriate location as approved by the Regional Administrator, records of all monitoring information required under the terms of this Permit, including all calibration and maintenance records, records of all data used to prepare documents required by this Permit, copies of all reports and records required by this Permit, the certification required by 40 CFR § 264.73(b)(9), and records of all data used to complete the application for this Permit, for a period of at least three (3) years from the date of the sample, measurement, report, certification or application, or until Corrective Action and post-closure care obligations are completed, whichever date is later. As a generator of Hazardous Waste, the Permittee shall retain a copy of all notices, certifications, demonstrations, waste analysis data, and other documentation produced pursuant to 40 CFR Part 268 for at least five (5) years from the date that the waste which is the subject of such documentation was last sent for on-site or off-site treatment, storage, or disposal, or until Corrective Action and post-closure care obligations are completed, whichever date is later. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this Facility.

I.D.9.c. Records of monitoring information shall specify:

- i. The dates, exact place, and times of sampling, or measurements;
- ii. The individuals who performed the sampling or measurements;
- iii. The dates analyses were performed;
- iv. The name of the laboratory which performed the analyses;
- v. The analytical techniques or methods used; and
- vi. The results of such analyses.

I.D.10. Reporting Planned Changes

The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions which impact the CAMU.

I.D.11. Anticipated Noncompliance

The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted Facility or activity which may result in noncompliance with the requirements of this Permit.

I.D.12. Transfer of Permit

This Permit may be transferred to a new owner or operator only after notice to the Regional Administrator and only if the Permit is modified or revoked and reissued pursuant to 40 CFR § 270.40(b) or § 270.41(b)(2) to identify the new permittee and incorporate such other requirements as may be necessary under RCRA. Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during post-closure care, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270, HSWA, and this Permit.

I.D.13. Schedules of Compliance

Written notification of compliance or noncompliance with any item identified in the Schedule of Compliance (Appendix C) of this Permit shall be submitted according to each schedule date. If the Permittee does not notify the Regional Administrator within fourteen (14) calendar days of its compliance or noncompliance with the schedule, the Permittee shall be subject to an enforcement action. Submittal of a required item according to the schedule constitutes notification of compliance.

I.D.14. Twenty-four Hour Reporting

I.D.14.a. The Permittee shall report any noncompliance which may endanger human health or the environment. Any such information shall be reported orally to the Regional Administrator within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. This report shall include:

- i. Information concerning the Release of any Hazardous Waste or Hazardous Constituents which may endanger public drinking water supplies.
- ii. Information concerning the Release or discharge of any Hazardous Waste or Hazardous Constituents, or of a fire or explosion at the Facility, which could threaten the environment or human health outside the Facility.

I.D.14.b. The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the owner or operator;

- ii. Name, address, and telephone number of the Facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazard to the environment and human health outside the Facility; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.

I.D.14.c. A written report shall also be provided to the Regional Administrator within fifteen (15) calendar days of the time the Permittee becomes aware of the circumstances. The written report shall contain the information specified under Conditions I.D.14.a. and I.D.14.b.; a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

I.D.15. **Other Noncompliance**

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time written reports as required by this Permit are submitted. The reports shall contain the information listed in Condition I.D.14., as appropriate.

I.D.16. **Other Information**

Whenever the Permittee becomes aware that the Permittee failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report(s) or document(s) submitted to the Regional Administrator, the Permittee shall promptly submit such facts or information.

I.E. **SIGNATORY REQUIREMENT**

All applications, reports, or information submitted to the Regional Administrator shall be signed and certified in accordance with 40 CFR § 270.11.

I.F. **CONFIDENTIAL INFORMATION**

The Permittee may claim confidential any information required to be submitted by this Permit in accordance with 40 CFR § 270.12.

I.G. **DEFINITIONS**

For purposes of this Permit, terms used herein shall have the same meaning as those in RCRA and 40 CFR Parts 124, 260, 261, 264, 268, and 270, unless this Permit specifically provides otherwise. Where terms are not defined in the regulations, the Permit, or EPA guidelines or publications, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

For purposes of this Permit, the following terms have the meanings set forth below:

I.G.1. The term "Area of Concern" (AOC) includes any area having a probable Release of a Hazardous Waste or Hazardous Constituent which is not from a Solid Waste Management Unit (SWMU) and is determined by the Commonwealth of Kentucky or the Regional Administrator to pose a current or potential threat to human health or the environment. Such Areas of Concern may require investigations and remedial action as required under Section 3005(c)(3) of RCRA and 40 CFR § 270.32(b)(2) in order to ensure adequate protection of human health and the environment.

I.G.2. "Corrective Action" shall be defined as all activities, including activities beyond the Facility boundary, that are proposed or implemented to facilitate assessment, monitoring, and active or passive remediation of Releases of Hazardous Waste or Hazardous Constituents to soil, groundwater, surface water, or the atmosphere associated with SWMUs and/or AOCs located at the Facility or off-site as required by 40 CFR § 264.100 and 40 CFR § 264.101, or as otherwise specified by this Permit.

I.G.3. A "Corrective Action Management Unit" (CAMU) includes any area within the Facility that is designated by the Regional Administrator under 40 CFR Part 264, Subpart S, for the management of Remediation Wastes pursuant to implementing Corrective Action requirements at the Facility.

I.G.4. "Corrective Measures" include all Corrective Action necessary to protect human health and the environment for all Releases of Hazardous Waste or Hazardous Constituents from any SWMU or AOC at the Facility, regardless of the time at which waste was placed in the unit, as required by 40 CFR § 264.101. Corrective Measures may address Releases to air, soils, surface water or groundwater.

- I.G.5.** “**Disposal**” includes the discharge, deposit, injection, dumping, spilling, leaking, or placing of any Solid Waste into or on the land or water so that the waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwater.
- I.G.6.** “**Extent of Contamination**” is defined as the horizontal and vertical area in which the concentrations of Hazardous Constituents in the environmental media being investigated are above detection limits or background concentrations indicative of the region, whichever is appropriate as determined by the Regional Administrator.
- I.G.7.** The “**Facility**” means all contiguous property under control of the Permittee as of the effective date of this Permit. A “facility” includes all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, or disposing of Hazardous Waste. A “facility” may consist of several treatment, storage, or disposal operational units (e.g. one or more Landfills, surface impoundments, or combination of them). For the purposes of implementing Corrective Action under 40 CFR § 264.101, a “facility” includes all contiguous property under the control of the owner or operator seeking a permit under Subtitle C of RCRA.
- I.G.8.** “**Hazardous Constituents**” are those substances listed in 40 CFR Part 261 Appendix VIII and Part 264 Appendix IX.
- I.G.9.** “**Hazardous Waste**” means a Solid Waste, or combination of Solid Wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may: (a) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed. For further clarification of the definition of Hazardous Waste, refer to 40 CFR § 260.10 and § 261.3.
- I.G.10.** “**Interim Measures**” are actions necessary to minimize or prevent the further migration of contaminants and limit actual or potential human and environmental exposure to contaminants while long-term Corrective Action remedies are evaluated and, if necessary, implemented.
- I.G.11.** “**Land Disposal**” means placement in or on the land except for a CAMU and includes, but is not limited to, placement in a Landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes.

- I.G.12.** “**Landfill**” includes any disposal facility or part of a facility where Hazardous Waste is placed in or on the land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground mine, a cave, or a CAMU.
- I.G.13.** “**Permit Renewal Application**” refers to the Permit Renewal Application; Hazardous and Solid Waste Amendments Corrective Action Management Unit Portion of the Resource Conservation and Recovery Act Permit, dated June 27, 2013, incorporated into this CAMU Permit as Appendix A.
- I.G.14.** “**Post-Closure Care Period**” refers to the period beginning at closure of the CAMU in 2005 and continuing for thirty (30) years, except that such period may be extended if the Regional Administrator finds that the extended period is necessary to protect human health and the environment.
- I.G.15.** “**Regional Administrator**” means the Regional Administrator for the EPA Region in which the Facility is located, or his/her designee.
- I.G.16.** A “**Release**” includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment of any Hazardous Waste or Hazardous Constituents.
- I.G.17.** “**Remediation Waste**” includes all Solid and Hazardous Wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, which contain listed Hazardous Wastes or which themselves exhibit a Hazardous Waste characteristic, that are managed for the purpose of implementing Corrective Action requirements under 40 CFR § 264.101. Remediation Wastes may originate only from within the Facility boundary, but may include waste managed in implementing RCRA Section 3004(v) for Releases beyond the Facility boundary.
- I.G.18.** “**Solid Waste**” means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (86 Stat. 880), or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923). For further clarification of the definition of Solid Waste, refer to 40 CFR § 260.10 and § 261.2.

- I.G.19. A “Solid Waste Management Unit” (SWMU) includes any unit which has been used for the treatment, storage, or disposal of Solid Waste at any time, irrespective of whether the unit is or ever was intended for the management of Solid Waste. RCRA Hazardous Waste management units are also SWMUs. SWMUs include areas that have been contaminated by routine and systematic Releases of Hazardous Waste or Hazardous Constituents, excluding one-time accidental spills that are immediately remediated and cannot be linked to Solid Waste management activities (e.g. product or process spills).
- I.G.20. “Storage” includes the holding of Hazardous Waste for a temporary period, at the end of which the Hazardous Waste is treated, disposed, or stored elsewhere.
- I.G.21. A “Temporary Unit” (TU) includes any temporary tanks and/or container storage areas used solely for treatment or storage of hazardous Remediation Wastes during specific remediation activities. Designated by the Regional Administrator, such units must conform to specific standards, and may only be in operation for a period of time as specified in this Permit.
- I.G.22. “Treatment” includes any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any Hazardous Waste so as to neutralize it, or render it nonhazardous or less hazardous, or to recover it, make it safer to transport, store or dispose of, or amenable for recovery, storage, or volume reduction.
- I.G.23. A “unit” includes, but is not limited to, any Landfill, surface impoundment, waste pile, land treatment unit, incinerator, injection well, tank, container storage area, septic tank, drain field, wastewater treatment unit, elementary neutralization unit, transfer station, or recycling unit.

PART II - CORRECTIVE ACTION MANAGEMENT UNIT (CAMU)

Beazer East, Inc. and Koppers Inc. submitted a CAMU application on May 23, 2000, pursuant to 40 CFR § 264.550. On January 4, 2001, EPA and the Kentucky Department for Environmental Protection (KDEP) determined that the CAMU application was substantially complete and "grandfathered" under 40 CFR § 264.550. As a result, the CAMU was subject to the standards described in 40 CFR § 264.551 as set forth at 58 FR 8658, dated February 16, 1993, for the life of the CAMU. The CAMU Rule was redesignated and amended at 67 FR 3025 on January 22, 2002. The HSWA CAMU permit became effective December 24, 2003. CAMU closure was certified in 2005 and is documented in the Permit Renewal Application (Appendix A).

II.A. APPLICABILITY

For the purpose of implementing Corrective Action under 40 CFR § 264.101, the Regional Administrator has designated an area within the contiguous property under the control of the Permittee as a CAMU, as defined in 40 CFR § 264.551(a), to be operated in accordance with the requirements of this Permit. CAMUs that were approved before April 22, 2002, or for which substantially complete applications (or equivalents) were submitted to EPA on or before November 20, 2000, are subject to the requirements in 40 CFR § 264.551 for "grandfathered" CAMUs. CAMU waste, activities, and design will not be subjected to the standards in 40 CFR § 264.552 (Amendments to CAMU Rule; Final Rule, January 22, 2002), as long as the waste, activities, and design remain within the general scope of the CAMU as approved.

II.A.1. Placement of Remediation Wastes into or within the CAMU does not constitute Land Disposal of Hazardous Wastes.

II.A.2. Consolidation or placement of Remediation Wastes into or within the CAMU does not constitute creation of a unit subject to minimum technology requirements.

II.B. LOCATION AND AERIAL CONFIGURATION OF THE CAMU

The location of the CAMU is shown in Figure 1, and the center of the CAMU is described by the coordinates N36.648554 latitude and W87.161487 longitude. The CAMU is located over the footprint of the Former Impoundment (SWMU #6). The aerial configuration of the CAMU is designated pursuant to 40 CFR § 264.551(e)(1) in the table below.

CAMU Boundary Area			
Point	North Latitude	West Longitude	Description
1	36.648820	87.161352	Northern most edge of CAMU
2	36.648656	87.160779	Eastern most edge of CAMU
3	36.648141	87.161714	Southern most edge of CAMU
4	36.648460	87.162100	Western most edge of CAMU

II.C.

CAMU DESCRIPTION

The CAMU is described in Section 3.1 of the attached Permit Renewal Application (Appendix A). A detailed description of the CAMU design is presented in Attachment A of the Permit Renewal Application (Closure Report Sediment and Mud Track Interim Measures and Corrective Action Management Unit).

The area of the CAMU is approximately 2.5 acres and contains approximately 9,370 cubic yards of Remediation Waste from the removal of creosote-impacted soil and sediment from the Mud Track Area and the Unnamed Tributary. The as-built design of the CAMU includes:

- a) Subgrade raised two (2) feet above historical high water table elevation;
- b) Basal geomembrane layer placed over prepared subgrade;
- c) Waste solidified to an unconfined compressive strength greater than ten (10) pounds per square inch; and
- d) Multi-component cover system consisting of a High Density Polyethylene geomembrane barrier layer, a geocomposite drainage layer, and a twenty-four (24) inch thick soil and vegetative layer.

II.D.

CAMU OPERATION

The CAMU is a closed Landfill and shall not receive waste. The CAMU shall be operated in accordance with Section 4 of the Permit Renewal Application (Post-Closure Care Plan). The operations of the CAMU include inspection, maintenance, and groundwater monitoring.

II.E. GROUNDWATER MONITORING

The CAMU groundwater monitoring program to be conducted during the Post-Closure Care Period shall be conducted in accordance with 40 CFR § 264.551(e)(3)(i) and (ii); Condition I.D.9.a.; and Section 4.2 (Groundwater Monitoring) and Attachment B (Groundwater Sampling Analysis Plan) of the Permit Renewal Application (Appendix A).

- II.E.1.** The Permittee's CAMU groundwater monitoring program shall be sufficient to:
- II.E.1.a.** Assess the groundwater conditions in the upper most aquifer (A-Horizon) of the CAMU at all groundwater monitoring wells described in Condition II.E.2.
- II.E.1.b.** Assess potential Releases to the A-Horizon aquifer through the statistical methods followed in the recommendations and methodologies described in EPA's Data Quality Assessment, A Reviewer's Guide (EPA QA/G-9R) (USEPA, 2006); Data Quality Assessment, Statistical Methods for Practitioners (EPA QA/G-9S) (USEPA, 2006); and Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guide (EPA 530R-09-07) (USEPA, 2009).
- II.E.1.c.** Detect and characterize the nature, extent, concentration, direction, and movement of potential Releases of Hazardous Constituents in the groundwater from sources located within the CAMU during the Post-Closure Care Period.
- II.E.2.** The Permittee shall conduct groundwater monitoring at the CAMU groundwater monitoring network consisting of upgradient Monitoring Well MW-07A and downgradient Monitoring Wells MW-05A, MW-08A, and MW-50A, illustrated in Figure 1.
- II.E.3.** The frequency of groundwater monitoring will include semi-annual groundwater monitoring assessment during the Post-Closure Care Period to detect site-specific constituents specified in Table 1. Groundwater monitoring shall take place during the second and fourth quarters of each year.
- II.E.4.** Sixty (60) calendar days after the end of each calendar year, the Permittee shall submit to the Regional Administrator an annual groundwater monitoring report that describes all sampling events performed during the calendar year, the results of the analyses, groundwater elevations, and statistical analyses to determine if a Release has occurred.
- II.E.5.** If the results of semi-annual groundwater monitoring indicate that a Release has occurred from the CAMU to the groundwater, the Permittee shall notify the Regional Administrator within twenty-four (24) hours verbally and within seven (7) calendar days in writing to confirm the Release.

II.E.6. If a Release has occurred from the CAMU to the groundwater, the Permittee shall submit to the Regional Administrator an Engineering Plan with an implementation schedule within thirty (30) calendar days of notification to the Regional Administrator designed to mitigate the Release to groundwater.

II.E.7 After EPA approval of the Engineering Plan, the Permittee shall begin implementation of the Engineering Plan schedule within sixty (60) calendar days of approval.

II.F. POST-CLOSURE CARE

The Post-Closure Care Period began in 2005 after EPA and KDEP received the CAMU Closure Certification Letter and Report, dated March 16, 2005. A deed restriction for the CAMU is located in Appendix B of this Permit. It is anticipated that an Environmental Covenant will be recorded for the Facility, encompassing the CAMU, as a part of the final remedy implemented under the Hazardous Waste Facility Post-Closure and Corrective Action Permit issued by the Commonwealth of Kentucky.

II.F.1. Post-closure care for the CAMU began immediately after final closure of the CAMU in 2005 and shall continue for thirty (30) years. The Post-Closure Care Period may be extended if the Regional Administrator finds that such extended period is necessary to protect human health and the environment.

II.F.2. The Permittee shall implement the Post-Closure Care Plan (Section 4 of the Permit Renewal Application) that addresses steps necessary to protect human health and the environment. The Post-Closure Care Plan shall include monitoring and maintenance activities performed at a frequency necessary to ensure the integrity of any cap, final cover, or other containment system for the life of the CAMU according to the requirements in Section 4 of the Permit Renewal Application.

II.F.3. Within sixty (60) calendar days after the end of each calendar year, the Permittee shall submit to the Regional Administrator an annual report describing post-closure care activities (including groundwater monitoring pursuant to Condition II.E. and maintenance activities pursuant to Condition II.F.2) associated with this CAMU.

II.F.4. The Permittee shall notify the Regional Administrator within twenty-four (24) hours verbally and in writing within seven (7) calendar days if the integrity of the CAMU cap or waste containment structure has been compromised.

II.F.5. The Permittee shall provide a report within sixty (60) calendar days of the written notification to the Regional Administrator of the compromise of the CAMU cap or waste containment structure describing measures taken to restore the integrity of the CAMU cap or waste containment structure.

II.G. COST ESTIMATE FOR POST-CLOSURE CARE AND CORRECTIVE ACTION FOR THE CAMU

An Estimated Cost of the Work, Surety Bond, and Standby Trust Agreement were submitted for the post-closure care and corrective action of the CAMU with EPA as the beneficiary in 2015. These documents are located in Appendix D of this Permit.

II.G.1. The Permittee shall prepare a cost estimate for the performance of the post-closure care and corrective action required under this Permit for the CAMU in order to provide financial assurance for completion of the post-closure care and corrective action. Such cost estimate shall be based upon a thirty (30) year rolling average. The cost estimate shall also cover the total third party cost of performing the post-closure care and corrective action. Third-party costs are described in 40 CFR § 264.142(a)(2) and shall include all direct costs and also all indirect costs (including contingencies) as described in EPA Directive No. 9476.00-6 (November, 1986), Volume III, Chapter 10. The cost estimate shall contain sufficient details to allow it to be evaluated by the Regional Administrator.

II.G.2. The Permittee shall annually adjust the cost estimate for inflation sixty (60) calendar days prior to the anniversary date of the establishment of the financial assurance mechanism unless using a financial test or corporate guarantee, in which case the estimate shall be updated thirty (30) calendar days after the close of the firm's fiscal year.

II.G.3. The Permittee shall submit cost adjustments for modifications to the Post-Closure Care Plan to the Regional Administrator within thirty (30) calendar days after receiving approval of the modification if the change increases the cost of post-closure care or corrective action.

II.H. FINANCIAL ASSURANCE FOR POST-CLOSURE CARE AND CORRECTIVE ACTION

II.H.1. The Permittee shall demonstrate continuous compliance with 40 CFR § 264.90(a)(2) and § 264.101 by providing documentation of financial assurance using a mechanism described in 40 CFR § 264.140 through § 264.151 in at least the amount of the cost estimate required under Condition II.G.1.

II.H.2. The Permittee shall submit financial assurance no later than sixty (60) calendar days after the approval of the cost estimate described in Condition II.G.1. of this Permit.

II.H.3. The Permittee may use the mechanisms described in 40 CFR § 264.140 through § 264.151 for financial assurance.

II.I.

SCHEDULE OF COMPLIANCE FOR CAMU

The Permittee shall comply with all time frames specified in the Conditions of Part II of this Permit and the Schedule of Compliance in Appendix C.

TABLE

TABLE 1

Groundwater Analytes for the CAMU Groundwater Monitoring System
Benzene
Toluene
Ethylbenzene
Xylenes
Naphthalene
Acenaphthylene
Acenaphthene
Fluorene
Phenanthrene
Anthracene
Fluoranthene
Pyrene
Benzo(a)anthracene
Chrysene
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenz(a,h)anthracene
Benzo(g,h,i)perylene

FIGURES

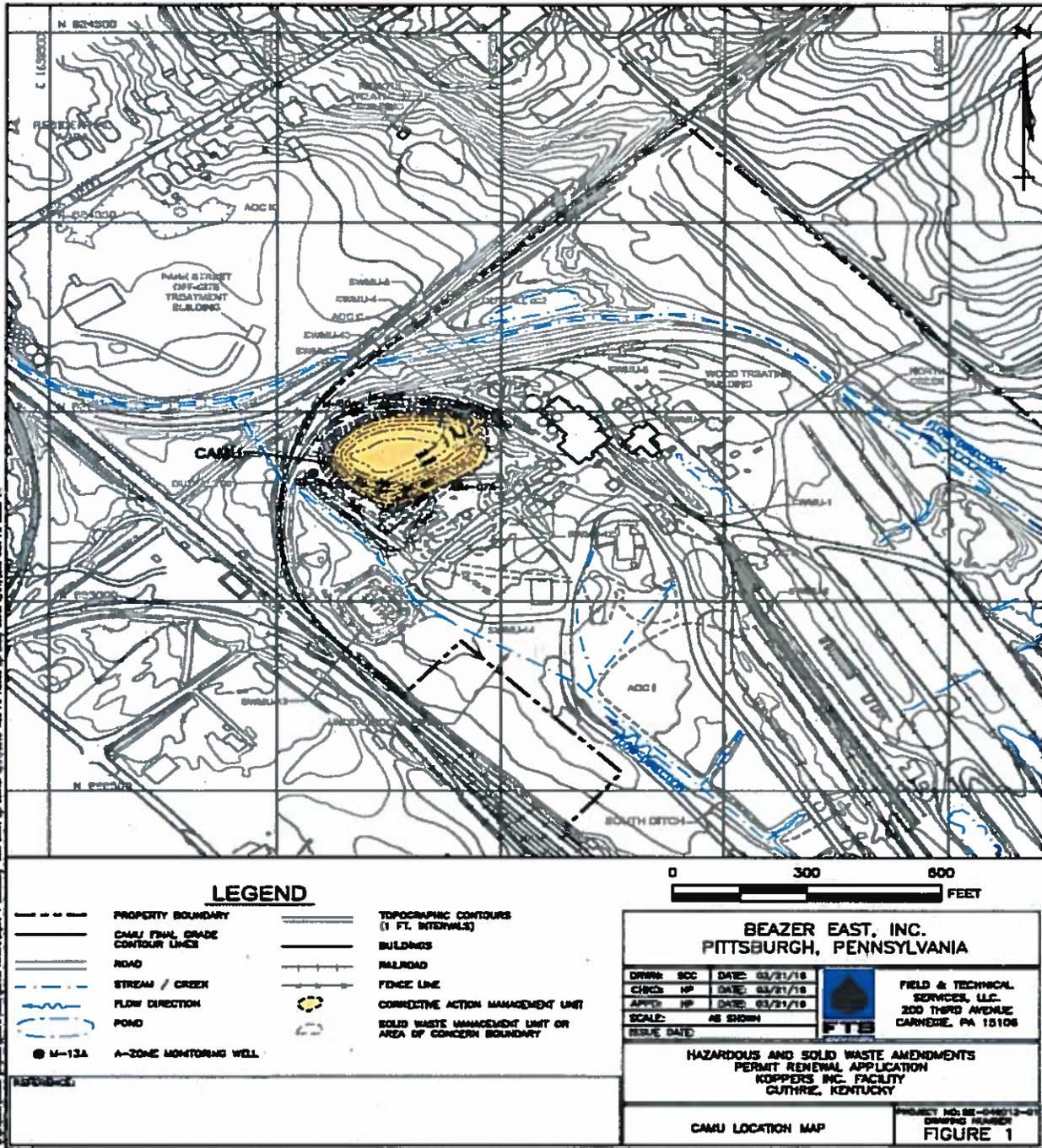


Figure 1
CAMU Location Map

APPENDICES

APPENDIX A

Permit Renewal Application

**Hazardous and Solid Waste Amendments Corrective Action Management Unit Portion of the Resource
Conservation and Recovery Act Permit, dated June 27, 2013**

APPENDIX B
CAMU Deed Notice

Beazer

BEAZER EAST, INC. C/O THREE RIVERS MANAGEMENT, INC.
ONE OXFORD CENTRE, SUITE 3000, PITTSBURGH, PA 15219-6401

Transmitted via Federal Express

June 16, 2005

Mr. James Smith
North Programs Section
RCRA Programs Branch
United States Environmental Protection Agency – Region 4
Atlanta Federal Center
61 Forsyth Street, S.W.
Atlanta, Georgia 30303-8960

Mr. Michael V. Welch, P.E.
Manager
Hazardous Waste Branch
Kentucky Department for Environmental Protection
Frankfort Office Park
14 Reilly Road
Frankfort, Kentucky 40601

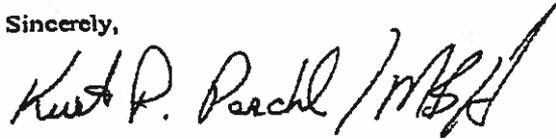
Re: Deed Notice for the Corrective Action Management Unit (CAMU) in Accordance with
The HSWA CAMU Portion of the RCRA Permit (USEPA) and
The Hazardous Waste Management Major Permit Modification (KYDEP)
Koppers Inc. Facility
Guthrie, Kentucky
EPA ID No. KYD 006 383 392

Dear Mr. Smith and Mr. Welch:

Attached please find a copy of the notice to the deed for the Koppers Inc. Guthrie, Kentucky property upon which a Corrective Action Management Unit (CAMU) was constructed. The notice was recorded with the Todd County (Kentucky) Clerk on May 13, 2005 in Miscellaneous Book Vol. 7, Page 758. Submission of this information provides evidence that Condition II.G.8 of the Hazardous and Solid Waste Amendments (HSWA) CAMU portion of the Resource Conservation and Recovery Act (RCRA) permit (administered by the United States Environmental Protection Agency) and Condition VIII.G.8 of the Hazardous Waste Management Major Permit Modification (administered by the Kentucky Department for Environmental Protection) has been fulfilled.

Please contact me at 412-208-8863 if you have any questions regarding this information.

Sincerely,

Handwritten signature of Kurt P. Paschl in black ink, appearing as 'Kurt P. Paschl / MBH'.

Kurt P. Paschl
Environmental Manager

KPP/mbh

Encl. (1)

cc: Ahad Chowdhury (KYDEP)
Elton McGough (Koppers, Inc.)
Patrick Stark (Koppers, Inc.)
Mark Hanish (Blasland, Bouck & Lee, Inc.)

**NOTICE PURSUANT TO
RESOURCE CONSERVATION AND RECOVERY ACT**

THIS NOTICE PURSUANT TO RESOURCE CONSERVATION AND RECOVERY ACT (this "Notice"), dated this 12th day of May, 2005, is executed and delivered by Koppers Inc., a Pennsylvania corporation ("Koppers") with offices at 436 Seventh Avenue, Pittsburgh, Pennsylvania 15219.

1. Koppers is the owner of a certain parcel of real property (the "Property") situated in Guthrie, Kentucky, and described as follows:

Beginning at a point, said point being an existing concrete monument located in the Northeast right-of-way line of a tract conveyed to CSX Transportation, Inc., said point being 80 feet from the main line tract of said railroad in Guthrie, Kentucky, said point being located 25 feet Northwest from the centerline of the Old Hadensville Road; thence a line with CSX Transportation, Inc., North 45 degrees 10 minutes 37 seconds West, 1,471.96 feet to an existing concrete monument in said line corner to the Payne property; thence a line with said Payne the next three (3) calls as follows: North 44 degrees 49 minutes 50 seconds East, 181.00 feet to an existing concrete monument; North 45 degrees 40 minutes 10 seconds West, 520.00 feet to an existing concrete monument; South 44 degrees 49 minutes 50 seconds West, 177.00 feet to an existing concrete monument corner to Payne also corner to CSX Transportation, Inc.; thence a line with CSX Transportation, Inc., North 45 degrees 10 minutes 10 seconds West, 392.00 feet to a point corner to CSX Transportation, Inc., said point being a P-K nail located within the railroad tracks of said CSX Transportation, Inc.; thence a line with CSX Transportation, Inc., North 06 degrees 40 minutes 33 seconds East, 407.66 feet to a point corner to CSX Transportation, Inc., said point being a P-K nail located within the railroad tracks of said CSX Transportation, Inc., said point also being a corner to a tract conveyed to R. J. Corman Railroad Company as recorded in Deed Book 122, Page 196 in the aforementioned County Court Clerk's Office; thence a line with R. J. Corman Railroad Company, North 48 degrees 17 minutes 57 seconds East, 1,193.00 feet to an existing corner post in said line corner to a tract conveyed to Elvis L. Bellar, et ux, as recorded in Deed Book 90, Page 351, in the aforementioned County Court Clerk's Office; thence a line with Elvis L. Bellar, et ux, the next (2) calls as follows: South 43 degrees 25 minutes 46 seconds East, 1,759.32 feet to an existing iron pin; North 52 degrees 58 minutes 47 seconds East, 2,030.41 feet to an existing iron pin corner to Elvis L. Bellar, et ux, in the line of a tract conveyed to Bardcor Corporation as recorded in Deed Book 122, Page 387, in the aforementioned County Court Clerk's Office; thence a line with Bardcor Corporation, South 12 degrees 05 minutes 50 seconds East, 1,123.96 feet to an existing iron pin corner to Bardcor Corporation also corner to a tract conveyed to Sherry S. Winn as recorded in Deed Book 120, Page 137, in the aforementioned County Court Clerk's Office; thence a line with Sherry S. Winn, South 52 degrees 29 minutes 46 seconds West, 1,788.50 feet to an iron pin corner to Sherry S. Winn located at the end of the Old Hadensville Road; thence a

line with said road, North 38 degrees 06 minutes 58 seconds West, 50.00 feet to an iron pin corner to said road; thence a line with the North right-of-way of said Old Hadensville Road, South 51 degrees 58 minutes 44 seconds West, 1,095.94 feet to the point of beginning and containing 129.270 acres.

Intended to be, and in fact being, the same property that was conveyed to Koppers Industries, Inc. by deed dated December 29, 1988, from Koppers Company, Inc. and found of record in Deed Book 125, Page 50, of the office of the Todd County Clerk, Todd County, Kentucky.

The aforementioned deed holder, Koppers Industries, Inc., subsequently changed its name to Koppers Inc. (the signatory to this Notice) through Articles of Amendment filed with the Pennsylvania Secretary of State on February 24, 2003, and which were recorded with the Kentucky Secretary of State on March 21, 2003.

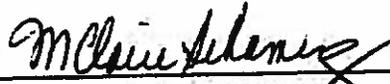
2. This Notice is recorded to fulfill Condition II.G.8 in the *Hazardous and Solid Waste Amendment (HSWA) CAMU Portion of the Resource Conservation and Recovery Act (RCRA) Permit* (EPA I.D. No. KYD 006 383 392) issued by the United States Environmental Protection Agency (the "U.S. EPA") to Koppers and Beazer East, Inc. (together, the "Permittees") on November 24, 2003 with respect to the Property, and Condition VIII.G.8 in the *Hazardous Waste Management Major Permit Modification* issued by the Kentucky Department for Environmental Protection (the "KYDEP") to the Permittees on December 15, 2003 with respect to the Property (together, the "Permits"). In accordance with the Permits, portions of the Property have been used to manage remediation waste that contains hazardous constituents. Specifically, under the Permits, a Corrective Action Management Unit ("CAMU") was constructed in the northwest corner of the Property to contain 9,370 cubic yards of sediment and soil excavated during the U.S. EPA-approved Sediment and Mud Track Interim Measures performed on the Property during the second half of 2004. A depiction of the Property, and the location of the CAMU therein, is attached as Exhibit A hereto. The sediments and soil placed in the CAMU contain relatively low concentrations of polycyclic aromatic hydrocarbons. The CAMU was closed in December of 2004. A Closure Report documenting the work, including the construction of the CAMU, was submitted to the U.S. EPA and the KYDEP on behalf of the Permittees on March 16, 2005.

3. The information contained in this Notice, once recorded in the office of the Todd County Clerk, Todd County, Kentucky, shall be deemed to run with the land of the Property in perpetuity.

IN WITNESS WHEREOF, Koppers has caused this Notice to be duly executed and attested the date and year first set forth above.

ATTEST:

KOPPERS INC.:


Name: M. Claire Schaming
Title: Assistant Secretary


By: _____
Name: Steven R. Lacy
Title: Sr. VP, Administration, General Counsel
and Secretary



ACKNOWLEDGEMENT

COMMONWEALTH OF PENNSYLVANIA)
)
COUNTY OF ALLEGHENY) SS:

BEFORE ME, the undersigned, a Notary Public in and for said Commonwealth and County, on this day personally appeared Steven R. Lacy, who acknowledged (him)(her)self to be the Sr. V.P. Administration of KOPPERS INC., a Pennsylvania corporation, and that (he)(she) as such officer, being authorized to do so, executed the foregoing instrument and acknowledged to me that (he)(she) executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 12 day of May, 2005.

Rose Marie Hillinski

Notary Public in and for Allegheny County, Pennsylvania

[SEAL]

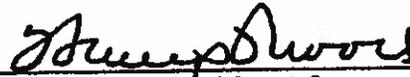
Notarial Seal
Rose Marie Hillinski, Notary Public
City of Pittsburgh, Allegheny County
My Commission Expires May 13, 2006
Member, Pennsylvania Association of Notaries

Prepared by and return to:

Frank Hampton Moore, Jr., Esq.
Cole & Moore
921 College Street
P.O. Box 10240
Bowling Green, Kentucky 42102-7240

Telephone: (270) 782-6666
Facsimile: (270) 782-8666

By:



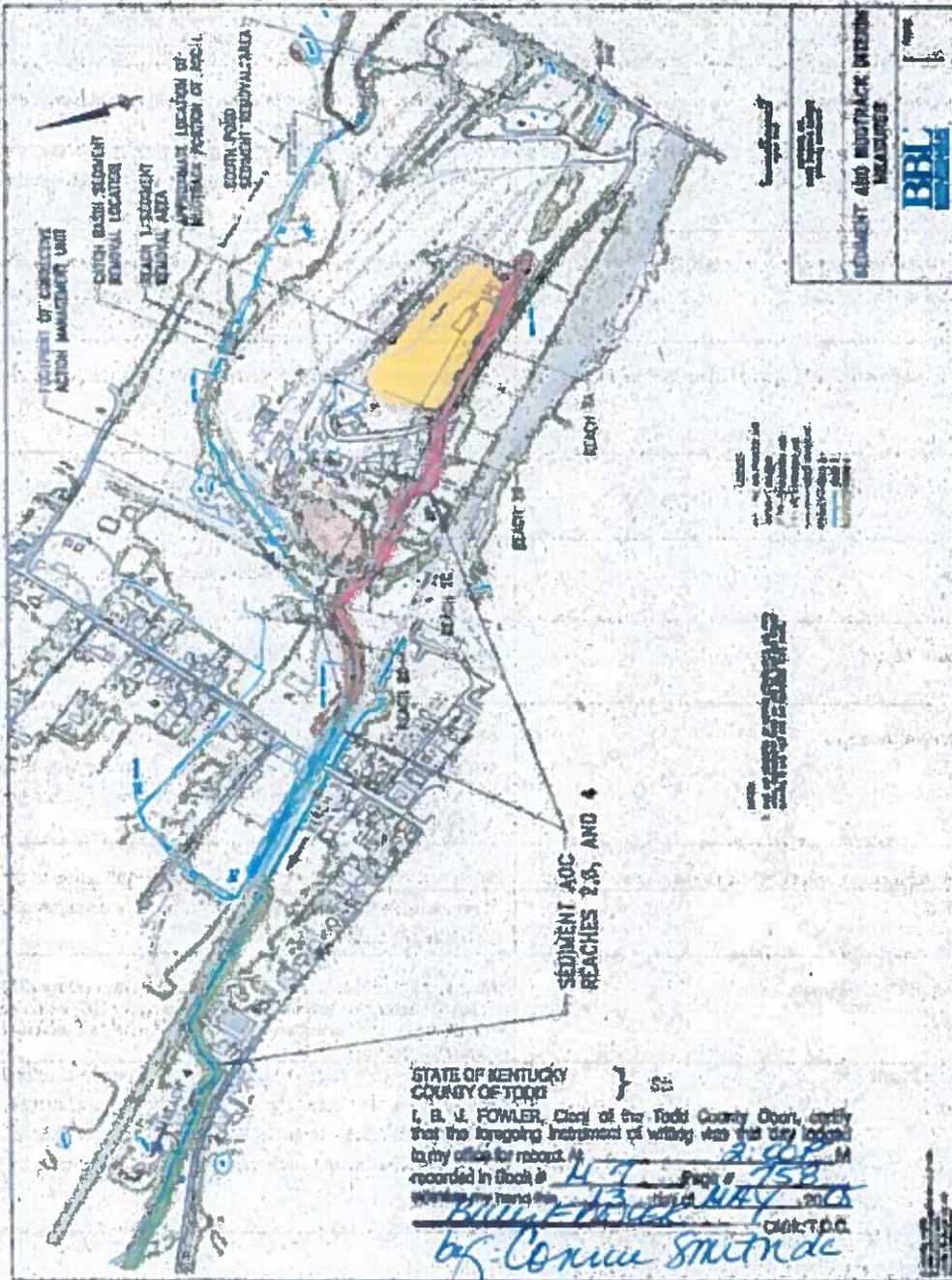
Frank Hampton Moore, Jr.

000763

EXHIBIT A

DEPICTION OF THE PROPERTY AND THE CAMU

[See Attached Map]



STATE OF KENTUCKY }
 COUNTY OF TODD } 5th

I, B. J. FOWLER, Clerk of the Todd County Court, certify that the foregoing instrument of writing was this day lodged to my office for record at 2:40 P.M.

recorded in Book # 258

written my hand this 13th day of MAY, 2001

Bill Fowler
 Clerk T.P.C.

by: Connie Smith

APPENDIX C
Schedule of Compliance

Schedule of Compliance	Due Date
Semi-Annual Groundwater Monitoring <i>See Condition II.E.3.</i>	Semi-annual groundwater monitoring is to be conducted during the second and fourth quarter of each year.
Annual Groundwater Monitoring Report <i>See Condition II.E.4.</i>	Within sixty (60) calendar days after the end of each calendar year.
Notification of release to groundwater from CAMU. <i>See Condition II.E.5.</i>	Notify Regional Administrator with verbal communications within twenty-four (24) hours of identification of a groundwater release and written notification within seven (7) calendar days.
Engineering Plan to address releases to groundwater from the CAMU. <i>See Condition II.E.6.</i>	Within thirty (30) calendar days of notification to the Regional Administrator.
Implementation of Engineering Plan schedule. <i>See Condition II.E.7.</i>	Implement the Engineering Plan schedule within sixty (60) calendar days of EPA approval of the Engineering Plan
Post-Closure Care <i>See Condition II.F.1.</i>	Begins immediately after final closure.
Annual Post-Closure Report <i>See Condition II.F.3.</i>	Within sixty (60) days after the end of each calendar year.
Verbal and Written Notifications <i>See Condition II.F.4.</i>	Notify Regional Administrator with verbal communications within twenty-four (24) hours of a compromise in the integrity of the cap or CAMU containment structure and written notification within seven (7) days.
Report Describing Repairs to Cap or CAMU Containment Structure <i>See Condition II.F.5.</i>	Within sixty (60) calendar days of written notification to the Regional Administrator that the CAMU cap or containment structure has been compromised.
Annual Adjustment of Cost Estimate <i>See Condition II.G.2..</i>	Within sixty (60) calendar days prior to the anniversary date of the financial assurance mechanism or within thirty (30) calendar days after the close of Permittee's fiscal year if using a financial test or corporate guarantee.
Financial Assurance Instrument <i>See Condition II.H.2.</i>	Within sixty (60) calendar days after EPA's approval of both the initial Estimated Cost of the Work, and the form, substance, and value of Permittee's financial assurance, whichever is later, Permittee shall submit such mechanisms and documents by certified mail to EPA.
The above reports must be signed and certified in accordance with 40 CFR § 270.11.	

Appendix D

Cost Estimate and Financial Assurance

APPENDIX D
ATTACHMENT A
ESTIMATED COST OF WORK

Bassett/Guthrie CAMU - 2015
Post-Closure Cost Estimate - EPA Region 4
 last update: 8/20/2015

For Official Use Only

1.0 CAMU Insp. & Maint		2015				Basis of Production and Quantities for Invoice Estimate		Facility Estimate (based on EPA's 2015 Unit Price Schedule)	
Direct Costs	Estimated Quantity	Unit of Measure	Unit Price	Extended Price	Quantity	Unit Price	Extended Price	Notes	
1.1 Monthly CAMU Inspections									
Site Area & Inspection Time	720	hrs	09	6,480	720	09	6,480	work rate based upon one hour per acre, and multiple trips as needed	
Technician	24.0	hours	\$42.00	\$1,008	24.0	\$42.00	\$1,008	facility estimate = 1.00 acre CAMU	
Per Diem	0.0	days	\$75.00	\$0.00	0.0	\$75.00	\$0.00	facility estimate based upon rate	
Vehicle/Fuel	3.0	days	\$40.00	\$120.00	3.0	\$40.00	\$120.00	minimum daily cost	
Notes	0.0	repts	\$100.00	\$0.00	0.0	\$100.00	\$0.00	vehicle rental plus fuel cost	
Subt - CAMU Inspections				\$1,128.00			\$1,128.00	minimum nightly rate	
1.2 CAMU Mowing & Weeding									
Mowers - 6 events per year	216.0	hr/yr	\$2.50	\$540.00	216.0	\$2.50	\$540.00	one acre = 6 acres mow @ 1.00 acre/acre/yr @ 6000 ft/yr	
Weeding - 3 events per year	137.0	hr/yr	\$3.00	\$411.00	137.0	\$3.00	\$411.00	RSMBAC p. 343 (11-01-10-14-15)	
Subt - Mowing & Weeding				\$951.00			\$951.00	RSMBAC p. 341 (11-01-10-14-15)	
1.3 CAMU Repair									
CAMU Construction Cost (Blank)	435.0	sq ft	\$1.43	\$621.15	435.0	\$1.43	\$621.15	facility estimate = \$100/acre (100' x 100' area)	
Subt - Annual Cap Repair				\$621.15			\$621.15	CAMU cost = \$100/acre based on 2015 facility CA governing	
1.4 Fencing/Security Repair									
Post Fence	09	hr	09	081	09	09	081	no facility estimate for this activity included in this estimate	
Post Fence	09	hr	09	081	09	09	081	estimated 1.00 LF fencing	
Repair/Fencing Locking Cover	8.0	LF	\$120.00	\$960.00	8.0	\$120.00	\$960.00	RSMBAC p. 310 (11-01-10-14-15)	
Repair/Fencing	8.0	LF	\$120.00	\$960.00	8.0	\$120.00	\$960.00	RSMBAC p. 310 (11-01-10-14-15)	
Subt - Fencing Repair				\$1,021.15			\$1,021.15	length of new installation area	
1.5 GW Mon Wall Insp. & Repair									
Ins. GW Wall	09	hr	09	081	09	09	081	no facility estimate for this activity included in this estimate	
Inspection	2.0	hours	\$45.00	\$90.00	2.0	\$45.00	\$90.00	one GW mon wall every 10 yrs	
Repair/Replace Locking Cover	8.0	LF	\$120.00	\$960.00	8.0	\$120.00	\$960.00	facility estimate based upon rate	
GW Wall Replicators	0.10	walls	\$3,000.00	\$300.00	0.10	\$3,000.00	\$300.00	one wall every 10 yrs	
Subt - GW Mon Wall Insp. Repair				\$1,350.00			\$1,350.00	annual wall inspection and repair - replace one GW mon wall every 10 yrs	
Subt - Assemblies 1.1 thru 1.5				\$3,532.15			\$3,532.15		

1.6 CAMU Insp. & Maint		2015				Basis of Production and Quantities for Invoice Estimate		Facility Estimate (based on EPA's 2015 Unit Price Schedule)	
Direct Costs	Estimated Quantity	Unit of Measure	Unit Price	Extended Price	Quantity	Unit Price	Extended Price	Notes	
1.6 Semi-Annual GW Monitoring									
Technician	48.0	hours	\$45.00	\$2,160.00	48.0	\$45.00	\$2,160.00	work rate based upon two hours per well for 3-person crew, including travel time, etc.	
QC Analyst	12.0	hr/yr	\$45.00	\$540.00	12.0	\$45.00	\$540.00	one well 4.0 events @ \$1,024 event (including travel time)	
GW Analyst	12.0	hr/yr	\$1,041.17	\$12,494.04	12.0	\$1,041.17	\$12,494.04	facility estimate based upon rate	
Equipment Rental & Supplies	12.0	hr/yr	\$150.00	\$1,800.00	12.0	\$150.00	\$1,800.00	facility estimate based upon rate	
Drum for Surface Water Drums	2.0	drum	\$175.00	\$350.00	2.0	\$175.00	\$350.00	total capacity of drums is 100 gallons	
Lead/TAD Ocean Corrosion Drums	2.0	drum	\$175.00	\$350.00	2.0	\$175.00	\$350.00	total capacity of drums is 100 gallons	
Monitoring - Engineer	36.0	hr/yr	\$175.00	\$6,300.00	36.0	\$175.00	\$6,300.00	facility estimate based upon rate	
Subt - GW Monitoring				\$27,904.04			\$27,904.04	semi-annual sampling and analysis of GW mon wells	
1.7 Trench Excavation									
Technician	48.0	hours	\$45.00	\$2,160.00	48.0	\$45.00	\$2,160.00	one excavator @ \$1,000/acre @ two events	
Per Diem	0.0	days	\$75.00	\$0.00	0.0	\$75.00	\$0.00	minimum daily rate	
Vehicle/Fuel	3.0	days	\$40.00	\$120.00	3.0	\$40.00	\$120.00	minimum plus fuel cost	
Notes	0.0	repts	\$100.00	\$0.00	0.0	\$100.00	\$0.00	minimum nightly rate	
Subt - Trench Excavation				\$2,280.00			\$2,280.00	semi-annual trenching and analysis	
Subt - Assemblies 1.6 thru 1.7				\$3,260.00			\$3,260.00		

1.8 CAMU Insp. & Maint	Direct Costs: Total	\$11,272.15	\$11,272.15
Param Differential		120.75	120.75

Bassett/Guthrie, NY CAMU			
Total Cost Summary			
Cost Category	Percent of Direct Cost	2015 EPA Estimated Cost	Notes
For Activity Code: 1 Year P.C. Cost		\$11,393	
Indirect Management Cost	13.55%	\$1,544	facility projected a 13% indirect cost factor for site management and maintenance
Indirect - Other & Site Mgmt. Costs		\$1,487	
Contingency	13.55%	\$1,487	facility projected a 13% contingency
Total 1-Year CAMU-Cost Est. Cost		\$15,911	
No. CAMU-Cost Years Remaining		30	using 30-year P.C. rate
Total CAMU-Maint. Cost Estimate		\$481,771	
Percent Contingency		13.55%	facility cost estimate is 13.55% of EPA in-house cost estimate

NOTES:

A. Indirect costs, which may range from 15% to 30% for general construction projects, generally is expected to range at one-third those levels for post-closure care. The two major expense categories are:

- On-site management activities, which may include periodic site supervision, inspection, QA/QC, health & safety, and change order reviews; limited site security; monthly fire or non-existent cost for utilities; low levels of sampling and monitoring crew travel and per diem expenses; smaller efforts for planning and engineering (work plans); lower costs for insurance, permits (or compliance with permits), bonds, taxes, site access, reports, and very limited maintenance/repair activities. It is expected that this category would add between 5% and 10% to total costs, or 8% on average.
- Contractor (non-office overhead) typically includes indirect labor costs (fringe benefits), corporate management, administration, procurement, finance and accounting, personnel, sales, marketing, and profit. The labor and equipment rates employed in this sample cost are presumed to be fully-loaded time-and-materials rates, and are therefore sufficiently burdened with non-office overhead; however, the unit prices for materials and well maintenance and replacement are not burdened, and a 2% allowance has been added to the site-wide overhead factor.

B. The "Contingency" factor is a budget provision employed prior to construction (incurred) and which covers unforeseen site conditions or inflationary increases.

C. See OSWER Directive 8471.02-8 (November, 1985), Volume III, Chapter 10 for a further discussion of indirect costs and contingencies.

D. Cost References:

- "ECHOIAC" refers to the RSMears/ECHOI "Environmental Remediation Cost Data - Assemblies", 2005 Edition
- "ECHOIUP" refers to the RSMears/ECHOI "Environmental Remediation Cost Data - Unit Price", 2005 Edition
- "RSMBAC" refers to the RSMears "Building Construction Cost Data", 2011 Edition
- "RSMISWL" refers to the RSMears "Site Work and Landscaping Cost Data", 2011 Edition

E. All unit prices taken from the four references above have been adjusted by the weighted average locality index listed below:

Locality Index for:	Materials	0.87
8 State EPA Region 4 Average	Inspection	0.88
(2011 RSMISWL pp. 744 - 745)	Welding	0.91

F. For convenience, most unit prices have been rounded to the nearest dollar for convenience.

APPENDIX D

ATTACHMENT B

STANDYBY TRUST AGREEMENT AND FINANCIAL ASSURANCE INSTRUMENT

Beazer

BEAZER EAST, INC.

c/o Three Rivers Management, Inc. (Agent for Beazer East, Inc.)
1910 Cochran Road, Manor Oak One, Suite 200, Pittsburgh, PA 15220-1273

Bob Stewart
USEPA Region 4
RCRA/PCB Financial Assurance
RCRA Division
Atlanta Federal Center - 10th Floor
61 Forsyth Street, SW
Atlanta, GA 30303

REC 11/20/15
B. Stewart

Dear Mr. Stewart:

The enclosed documentation is being submitted to fulfill the RCRA Financial Assurance Requirements for the fiscal year ended December 31, 2015 for the following sites:

Beazer East, Inc. Guthrie site (ID KYD 006383392)

Beazer is providing the enclosed Standby Trust Agreement from BNY Mellon. Along with the Schedule A & B forms to the Standby Trust Agreement describing the new collateral.

If you require any additional information or further clarification, please contact me at (412) 208-8832.

Regards,



Ryan S. Hranica
Financial Analyst
Three Rivers Management, Inc. (Agent for Beazer East, Inc. and others)
Manor Oak One, Suite 200
1910 Cochran Road
Pittsburgh, PA 15220
Phone: (412) 208-8832
Fax: (412) 208-8803

STANDBY TRUST AGREEMENT

Trust Agreement, the "Agreement," entered into as of November, 18th, 2015 by and between Beazer East, Inc., a Delaware Corporation, the "Grantor," and The Bank of New York Mellon, a New York banking corporation, the "Trustee."

Whereas, the United States Environmental Protection Agency, "EPA," an agency of the United States Government, has established certain regulations applicable to the Grantor, requiring that an owner or operator of a hazardous waste management facility shall provide assurance that funds will be available when needed for corrective action at the facility.

Whereas, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facilities identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of Facilities and Cost Estimates. This Agreement pertains to the facilities and cost estimates identified on attached Schedule A.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EPA. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge and liabilities of the Grantor established by EPA.

Section 4. Payment for Corrective Action. The Trustee shall make payments from the Fund as the EPA Regional Administrator shall direct, in writing, to provide for the payment of the costs of corrective action at the facilities covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EPA Regional Administrator from the Fund for corrective action expenditures in such amounts as the EPA Regional Administrator shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EPA Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. *Commingling and Investment.* The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. *Express Powers of Trustee.* Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Annual Valuation. [Not required per 40 CFR 264.143(c) (3) (II) (C).]

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the Director, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EPA Regional Administrator to the Trustee shall be in writing, signed by the EPA Regional Administrators of the Regions in which the facilities are located, or his/her designee; and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to an on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein.

Section 15. Notice of Nonpayment. [Not required per 40 CFR 264.143(c) (3) (ii) (D).]

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by the Trustee and the appropriate EPA Regional Administrator if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Regional Administrator, or by the Trustee and the EPA Regional Administrator, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Innuity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EPA Regional Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Kentucky.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in 40 CFR 264.151(a)(1) as such regulations were constituted on the date first above written.

Grantor Beazer East, Inc.



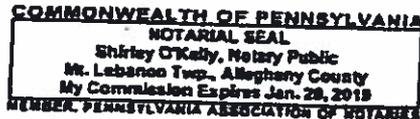
Robert S. Markwell
President



Attest: Charles E. McChesney II
Vice President & Secretary

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF ALLEGHENY

On this 18th day of November, 2015 before me personally came Robert S. Markwell to me known, who, being by me duly sworn, did depose and say that he resides at 1910 Cochran Road, Manor Oak One Suite 200, Pittsburgh, PA 15220, that he is President of Beazer East, Inc., the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that he signed his name thereto by like order.

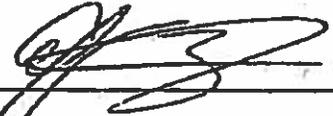

[Signature of Notary Public]

THE BANK OF NEW YORK MELLON, a NEW YORK BANKING CORPORATION



[Name] THOMAS HACKER
VICE PRESIDENT

[Title] _____

Attest: 

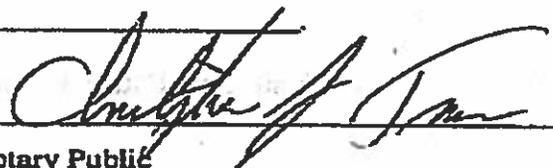
[Name] EPREN ALMAZAN
VICE PRESIDENT

[Title] _____

[Seal]
State of New York
County of New York, to-wit:

On this 19th day of November, 20 15, before me personally came ~~THOMAS HACKER~~
~~bank officer~~ to me known, who, being by me duly sworn, did depose and say that she/he is
[~~President or Vice-President~~] of The Bank of New York Mellon, a New York banking corporation
described in and which executed the above instrument; that she/he knows the seal of said
corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed
by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto
by like order.

My commission Expires 3/3/18



Notary Public

[Notary Seal]

CHRISTOPHER J. TRAINA
NOTARY PUBLIC-STATE OF NEW YORK
No. 01TR6297825
Qualified in Queens County
Certified in New York County
My Commission Expires March 03, 2018

SCHEDULE A

FACILITIES AND COST ESTIMATES

**KYD006383392,
(EPA Identification Number)**

**Koppers Inc Guthrie Plant
198 Fairgrounds Road PO Box 8
Guthrie, KY 42234,
(Facility Name)**

**\$0
(Closure Cost Estimate)**

**\$0
(Postclosure Cost Estimate)**

Current Cost Estimate for Corrective Action: \$481,701

SCHEDULE B

**TO STANDBY TRUST AGREEMENT
DATED DATE: November 18th, 2015**

**Koppers Inc Guthrie Plant (USEPA)
198 Fairgrounds Road PO Box 8
Guthrie, KY 42234
Federal EPA Identification Number# EPA ID # KYD006383392**

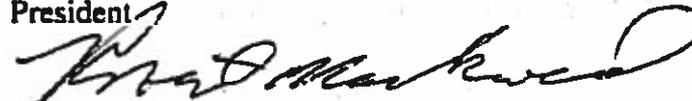
**PERFORMANCE BOND # [REDACTED] Issued by ARGONAUT INSURANCE COMPANY in the amount of
\$ 481,701.00**

**The cost estimates listed here were last adjusted on Date: September 10, 2015.
This schedule can be amended by replacing the current schedule with an updated schedule as of the date of this
Schedule B.**

EXHIBIT A

Designee:

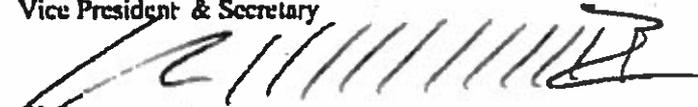
Robert S. Markwell
President



Signature

Designee:

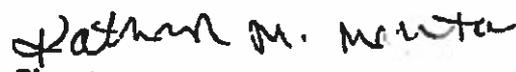
Charles E. McChesney II
Vice President & Secretary



Signature

Designee:

Kathryn M. Mehta
Vice President & Treasurer



Signature

Performance Bond

Date bond executed: October 9, 2015

Effective date: October 9, 2015

Principal: Beazer East, Inc. C/O Three Rivers Management, Inc.
1910 Cochran Road, Manor Oaks One, Suite 200, Pittsburgh, PA 15220

Type of Organization: Corporation

State of Incorporation: Delaware

Surety(ies): Argonaut Insurance Company
P. O. Box 469011
San Antonio, Texas 78246

EPA Identification Number, name, address, and corrective action amount(s) for each facility guaranteed by this bond:

KYD006383392
(EPA Identification Number)
Koppers Inc. Guthrie Plant
(Facility Name)
198 Fairgrounds Road
(Street Address)
Guthrie, KY 42234
(City, State, Zip)
\$481,701.00
(Corrective Action Amount)

Total penal sum of bond: \$481,701.00

Surety's bond number: [REDACTED]

Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly bound to the U.S. Environmental Protection Agency (hereinafter called EPA), in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and

severally* only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal is required, under the Resource Conservation and Recovery Act as amended (RCRA), to have a permit in order to own or operate each hazardous waste management facility identified above, and

Whereas said Principal is required to provide financial assurance for corrective action care, as a condition of the permit, and

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such financial assurance;

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully perform corrective action, whenever required to do so, of each facility for which this bond guarantees corrective action, in accordance with the corrective action plan and other requirements of the permit as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

And, if the Principal shall faithfully perform corrective action care of each facility for which this bond guarantees corrective action, in accordance with the corrective action plan and other requirements of the permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

Or, if the Principal shall provide alternate financial assurance as specified in subpart H of 40 CFR part 264, and obtain the EPA Regional Administrator's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and the EPA Regional Administrator(s) from the Surety(ies), then this obligation shall be null and void, otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the corrective action requirements of 40 CFR part 264, for a facility for which this bond guarantees performance of corrective action, the Surety(ies) shall either perform corrective action in accordance with the corrective action plan and other permit requirements or place the corrective action amount guaranteed for the facility into the standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has been found in violation of the corrective action requirements of 40 CFR part 264 for a facility for which this bond guarantees performance of corrective action care, the Surety(ies) shall either perform corrective action care in accordance with the corrective action plan and other permit requirements or place the corrective action amount guaranteed for the facility into the standby trust fund as directed by the EPA Regional Administrator.

Upon notification by an EPA Regional Administrator that the Principal has failed to provide alternate financial assurance as specified in subpart H of 40 CFR part 264, and obtain written approval of such assurance from the EPA Regional Administrator(s) during the 90 days following receipt by both the Principal and the EPA Regional Administrator(s) of a notice of cancellation of the bond, the Surety(ies) shall place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the EPA Regional Administrator.

The surety(ies) hereby waive(s) notification of amendments to corrective action plans, permits, applicable laws, statutes, rules, and regulations and agrees that no such amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the EPA Regional Administrator(s) for the Region(s) in which the facility(ies) is (are) located, provided, however, that cancellation shall not occur during the 120

days beginning on the date of receipt of the notice of cancellation by both the Principal and the EPA Regional Administrator(s), as evidenced by the return receipts.

The principal may terminate this bond by sending written notice to the Surety(ies), provided, however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization for termination of the bond by the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded facility(ies) is (are) located.

Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it guarantees a new corrective action amount, provided that the penal sum does not increase by more than 20 percent in any one year, and no decrease in the penal sum takes place without the written permission of the EPA Regional Administrator(s).

In Witness Whereof, The Principal and Surety(ies) have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 264.151(c) as such regulation was constituted on the date this bond was executed.

Principal: Beazer East Inc. C/O Three Rivers Management, Inc.


(Signature)

Robert S. Markwell
(Name, typed)

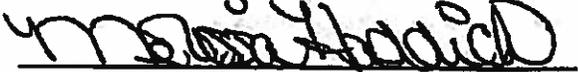
(Corporate seal):

Corporate Surety(ies): Argonaut Insurance Company

P O Box 469011
(Street Address)

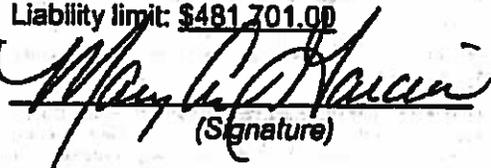
San Antonio, Texas 78246
(City, State, Zip)

State of Incorporation: Illinois


(Signature)

Melissa Haddick
(Name, typed)

Attorney-in-fact

Liability limit: \$481,701.00

(Signature)

Mary Ann Garcia
(Name, typed)

Witness

(Corporate seal):

Bond premium: \$N/A

Argonaut Insurance Company
Deliveries Only: 225 W. Washington, 24th Floor
Chicago, IL 60606

AS-0068462

United States Postal Service: P.O. Box 469011, San Antonio, TX 78246

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the Argonaut Insurance Company, a Corporation duly organized and existing under the laws of the State of Illinois and having its principal office in the County of Cook, Illinois does hereby nominate, constitute and appoint:

Sandra Parker, Tannis Matison, Melissa Haddock, Terri Morrison, Gina Rodriguez

Their true and lawful agent(s) and attorney(s)-in-fact, each in their separate capacity if more than one is named above, to make, execute, seal and deliver and on its behalf as surety, and as its act and deed any and all bonds, contracts, agreements of indemnity and other undertakings in suretyship provided, however, that the penal sum of any one such instrument executed hereunder shall not exceed the sum of:

\$35,000,000.00

This Power of Attorney is granted and is signed and sealed under and by the authority of the following Resolution adopted by the Board of Directors of Argonaut Insurance Company:

"RESOLVED, That the President, Senior Vice President, Vice President, Assistant Vice President, Secretary, Treasurer and each of them hereby is authorized to execute powers of attorney, and such authority can be executed by use of facsimile signature, which may be located or acknowledged by any officer or attorney, of the Company, qualifying the attorney or attorneys named in the given power of attorney, to execute in behalf of, and acknowledge as the act and deed of the Argonaut Insurance Company, all bond undertakings and contracts of suretyship, and to affix the corporate seal thereto."

IN WITNESS WHEREOF, Argonaut Insurance Company has caused its official seal to be hereunto affixed and these presents to be signed by its duly authorized officer on the 18th day of July, 2013.

Argonaut Insurance Company

by:

Joshua C. Betz, Senior Vice President

STATE OF TEXAS
COUNTY OF HARRIS SS:

On this 18th day of July, 2013 A.D., before me, a Notary Public of the State of Texas, in and for the County of Harris, duly commissioned and qualified, came THE ABOVE OFFICER OF THE COMPANY who is personally known to be the individual and officer described in, and who executed the preceding instrument, and he acknowledged the execution of same, and being by me duly sworn, deposed and said that he is the officer of the said Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and the said Corporate Seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority and direction of the said corporation, and that Resolution adopted by the Board of Directors of said Company, referred to in the preceding instrument is now in force.

IN TESTIMONY WHEREOF, I have hereunto set my hand, and affixed my Official Seal at the County of Harris, the day and year first above written.



Kathleen M. Meeks

(Notary Public)

I, the undersigned Officer of the Argonaut Insurance Company, Illinois Corporation, do hereby certify that the original POWER OF ATTORNEY of which the foregoing is a full, true and correct copy is still in full force and effect and has not been revoked.

IN WITNESS WHEREOF, I have hereunto set my hand, and affixed the Seal of said Company, on the 9th day of October, 2015

Sarah Heineman

Sarah Heineman, VP-Underwriting Surety

THIS DOCUMENT IS NOT VALID UNLESS PRINTED ON SHADED BACKGROUND WITH BLUE SERIAL NUMBER IN THE UPPER RIGHT HAND CORNER. IF YOU HAVE QUESTIONS ON AUTHENTICITY OF THIS DOCUMENT CALL (214) 321 - 8400.