

**UNITED STATES OF AMERICA v. BEAZER EAST, INC.**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF FLORIDA  
GAINESVILLE DIVISION

Appendix B

Statement of Work

APPENDIX B: STATEMENT OF WORK

STATEMENT OF WORK  
FOR RD/RA CONSENT DECREE  
EPA - Region IV

STATEMENT OF WORK FOR THE KOPPERS PORTION OF THE  
CABOT /KOPPERS SUPERFUND SITE  
OPERABLE UNITS 2-5

ALACHUA COUNTY, FLORIDA

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**STATEMENT OF WORK FOR THE  
REMEDIAL DESIGN AND REMEDIAL ACTION  
AT THE KOPPERS PORTION OF THE CABOT CARBON/KOPPERS SITE**

**I. INTRODUCTION**

This Statement of Work (SOW) outlines the work to be performed by Settling Defendant at the Koppers portion of the Cabot Carbon/Koppers Superfund Site in Alachua County, Florida (the Site). The work outlined is intended to fully implement the remedy as described in the Record of Decision (ROD) for the Site, dated February 2011, and to achieve the Performance Standards set forth in the ROD, Consent Decree, and this SOW. The requirements of this SOW will be further detailed in work plans and other documents to be submitted by the Settling Defendant for approval as set forth in this SOW. It is not the intent of this document to provide task specific engineering or geological guidance. The definitions set forth in Section IV of the Consent Decree shall also apply to this SOW unless expressly provided otherwise herein.

Settling Defendant is responsible for performing the Work to implement the selected remedy. EPA shall conduct oversight of the Settling Defendant's activities throughout the performance of the Work. The Settling Defendant shall assist EPA in conducting oversight activities.

EPA review or approval of a task or deliverable shall not be construed as a guarantee as to the adequacy of such task or deliverable. If EPA modifies a deliverable pursuant to Paragraph 14 of the Consent Decree, such deliverable as modified shall be deemed approved by EPA for purposes of this SOW. A summary of the major deliverables that Settling Defendant shall submit for the Work is included in Section IV of this SOW.

A. Overview of the Remedy

The remedy includes several interrelated and complimentary remedial components and technologies designed to treat and/or contain soil and water that has been impacted by Site-related constituents. The specific remedy components are identified in the ROD (at Section 11.2) and are described briefly in the next subsection. The objectives of this remedial action are to:

- Eliminate potential risks to receptors exposed to Site-related constituents in soil, groundwater, sediment, and surface water.
- Control and eliminate further migration of impacted groundwater.
- Restore the quality of groundwater outside the source/containment areas for beneficial use by meeting Federal Maximum Contaminant Levels (MCLs) and Florida Groundwater Cleanup Target Levels (GCTLs).

- Reduce the mobility, volume, and toxicity of dense, non-aqueous-phase liquid (DNAPL) to the maximum extent practicable.

## B. Remedy Components Including Treatment

The major components of the remedy are described in Section 11.2 of the ROD and are listed below. The components include in-situ treatment of soil and DNAPL in principal source areas and ex-situ treatment of extracted groundwater.

- **Soil Consolidation Area:** An on-Site soil consolidation area will be established as a containment/isolation area for impacted soil. Soil and sediment removed from other parts of the Site, and from off-Site areas, will be placed in the Consolidation Area. Excess treated soil from implementation of in-situ source treatment (see below) will also be located in the Consolidation Area. The Consolidation Area will be located within the area encircled by the subsurface cutoff wall (see below) and will be capped to minimize infiltration and recharge.
- **Cutoff Wall:** A continuous, vertical, subsurface barrier wall (e.g. slurry wall) will be constructed to mitigate horizontal groundwater and DNAPL movement from highly impacted areas to areas of no impact or little impact. The cutoff wall will extend from the ground surface to the middle clay of the Hawthorn Group formation, which is approximately 65 feet deep. The cutoff wall will completely encircle the four principal DNAPL source areas at the Site and adjacent areas with the highest groundwater concentrations, creating a Groundwater Containment Zone. A low-permeability cap will be installed to minimize infiltration and recharge into the Groundwater Containment Zone. The low-permeability middle clay layer of the Hawthorn Group will serve as the bottom of the Groundwater Containment Zone. Any impacts outside this Groundwater Containment Zone will be addressed by separate components, including hydraulic containment systems in the Surficial Aquifer and Upper Floridan Aquifer (UFA), and permanganate injections in the Hawthorn Group, as described below.
- **In-Situ Solidification/Stabilization (ISS/S):** Two of the principal source areas will be treated in place by amending the soil with materials such as cement and bentonite to solidify and stabilize DNAPL in place. The treatment will take place at the former North Lagoon and the former Drip Track and the target treatment zones will extend from the ground surface to the middle clay of the Hawthorn Group (approximately 65 feet deep). The additive mix design will be determined through treatability and pilot testing. A large-diameter (6 to 12 feet) auger will be used to mix the additive into the soil and excess soil will be contained in the Soil Consolidation Area. The final depth of ISS/S treatment will be based on pilot tests designed to determine the Site-specific practical depth limit of effective ISS/S application.
- **In-Situ Geochemical Stabilization (ISGS):** Two of the principal source areas will be treated in place through injection of a catalyzed sodium permanganate solution to stabilize DNAPL through a chemical encrustation process (with some beneficial chemical

oxidation also occurring). The treatment will take place at the former South Lagoon and the former Process Area. The ISGS injections will target residual and free-phase DNAPL impacted zones in the Surficial Aquifer and Upper Hawthorn. There has been previous pilot testing of ISGS at the Site. More detailed and complete field demonstration of ISGS effectiveness will be made during the remedial design process. Areas treated with ISGS will be monitored to ensure ongoing effectiveness. Should the ISGS treatment fail to perform as required by the criteria stipulated in the amended ROD, the Settling Defendant will be required to implement ISS/S in both the former South Lagoon and former Process Area.

- **In-Situ Chemical Oxidation and/or Geochemical Stabilization (ISCO/ISGS) via Existing Lower Hawthorn Wells:** Some existing Hawthorn Group monitoring wells will be used to deliver a chemical treatment solution to areas outside the ISS/S and ISGS source treatment zones where Performance Standards are not met (i.e. in Lower Hawthorn wells HG-10D, HG-16D, and HG-12D). The chemical agent will likely be a permanganate solution which will chemically oxidize some of the constituent mass and will geochemically stabilize any DNAPL in the area, if present. The permanganate solution will also decrease the hydraulic conductivity of the soil around the treatment well, thereby reducing mass flux from the area.
- **Treatment Actions in the Hawthorn Group:** In-situ injection of oxidizing chemicals or ISGS treatment in the lower Hawthorn Group in two of the four principal source areas (former Process Area and the former South Lagoon) and along the eastern property boundary through newly installed injection wells.
- **Upper Hawthorn DNAPL Recovery:** Passive DNAPL recovery by periodic bailing will continue at Upper Hawthorn monitoring wells that continue to have recoverable DNAPL: HG-11S, HG-15S, HG-12S, HG-10S, and HG-16S. This activity will be discontinued when the source treatment components are implemented. Recovered DNAPL will be shipped to an appropriate off-Site disposal/recycling facility.
- **On-Site Soil Excavation, Covers, and Grading:** Outside of the Groundwater Containment Zone/ Soil Consolidation Area, measures will be taken to prevent direct contact with impacted surface soil and to mitigate leaching of constituents to groundwater. In any areas where constituent concentrations in unsaturated soil are high enough to cause a groundwater Performance Standard exceedance due to leaching, the soil will be excavated. Surface covers (e.g. two feet of clean soil, pond liner, pavement) will be used to prevent direct contact with impacted soil. The final Site grades and cover materials will be designed to facilitate proper stormwater management and to allow for appropriate future use of the land. Excavated soil will be placed in the Soil Consolidation Area.
- **Stormwater Rerouting and Detention:** Stormwater management actions at the Site will include: (a) grading and contouring the Site to direct water toward designed collection points, (b) installation of one or more stormwater detention/retention basins, and possibly

(c) replacement of the existing main drainage ditch that flows through the Site with a new conveyance such as a ditch or underground pipe (culvert).

- **Surficial Aquifer Hydraulic Containment:** The existing hydraulic containment system will continue to be operated until Performance Standards in groundwater are met at the Surficial Aquifer points of compliance. The system includes extraction wells along the eastern Site boundary and along the northern part of the former storage yard. The system also includes four horizontal groundwater collection drains near the four source areas which will be operated until the source-treatment, cutoff-wall, and capping activities have been completed. The four groundwater drains may also be used subsequently for hydraulic control inside the Groundwater Containment Zone. The southernmost extraction wells will be abandoned during construction of the cutoff wall as the cutoff wall will provide containment in this area. Treatment and discharge of extracted groundwater are described below.
- **Upper Floridan Aquifer (UFA) Hydraulic Containment:** Targeted groundwater extraction in the UFA will be used to prevent off-Site migration of groundwater with concentrations exceeding Performance Standards (i.e. GCTLs). Treatment and discharge of extracted groundwater are described below.
- **Off-Site Soil Replacement:** Pending property-owner agreement, off-Site areas that have exceedances of any Soil Cleanup Target Level (SCTL) due to Site releases will be remediated by removing impacted surface soil and replacing it with clean soil. Excavated soil will either be placed in the on-Site Soil Consolidation Area or disposed of at an off-Site facility. Residential yards with replaced soil will be restored to conditions similar to their initial (pre-removal) conditions and proper stormwater drainage will be reestablished.
- **Off-Site Engineering Controls:** If agreed to by the property owner and Settling Defendant, engineering controls (e.g. covers, fences) and institutional controls may be implemented to eliminate exposure to off-Site soil with an SCTL exceedance.
- **Groundwater Pretreatment and Discharge:** Presently, extracted groundwater is treated at an on-Site pretreatment plant. A portion of the treated water (meeting drinking-water standards) may be used for Site irrigation; the remainder is discharged by permit to a Gainesville Regional Utilities sanitary sewer. These pretreatment and discharge activities will likely continue. However, the treatment train will be evaluated and potentially modified if needed for reliable and cost-effective treatment. Also, discharge of treated water to Springstead Creek may also be considered; in this case, the water will be treated to meet applicable surface-water discharge criteria.
- **Groundwater Monitoring:** Groundwater monitoring wells (existing and new) will be established as Performance Standards compliance points in the Surficial Aquifer, Upper Hawthorn, Lower Hawthorn, and UFA. Additional monitoring between the Groundwater Containment Zone and the compliance points will also be used as monitoring points to

evaluate plume changes and natural attenuation effectiveness (see below). UFA sentinel wells between the Site and the Murphree Well Field will also be monitored.

- **Natural Attenuation:** Monitoring data will be used to evaluate/demonstrate natural attenuation of components in groundwater. Also, natural attenuation will be evaluated for any sediment with Site-related concentrations exceeding Performance Standards in the ditch that runs from the Site to Springstead Creek, and in Springstead Creek/Hogtown Creek.
- **Off-Site Sediment Removal:** Pending delineation, establishment of responsibility, and natural-attenuation evaluation, Settling Defendant may be required to remove sediment where Performance Standards are not met in the off-Site ditch and Springstead Creek/Hogtown Creek.
- **Institutional Controls:** Deed restrictions and other appropriate policy/programmatic actions will be taken to ensure effectiveness of engineering controls and to eliminate potential exposure routes. For example, deed restrictions will prevent potable use of groundwater extracted at the Site, will limit the types of future Site development, and will require adherence to a Soil Management Plan for any construction causing surface or subsurface disturbance. State and local regulatory groundwater use restrictions will also remain in place during remediation.
- **Five-Year Reviews:** EPA will review remedy protectiveness every five years.
- **Post-Remedy Site Restoration:** Certain activities, such as abandonment of unused wells and facilities, will occur once the remedy is implemented, remedial operations have ceased, and Performance Standards are attained.

### C. Performance Standards and Compliance Testing

Settling Defendant shall meet all Performance Standards established for this Site. Performance Standards are cleanup standards and goals, standards of control, and other substantive requirements, criteria or limitations, identified in the ROD, the Remedial Action Work Plan, the Remedial Design Work Plan and the Remedial Design which are approved by EPA.

Settling Defendant shall perform compliance testing to ensure that all Performance Standards are met. Treated soil and groundwater shall be tested in accordance with the Performance Standard Verification Plan developed pursuant to Task 10 of Section II in this SOW.

After demonstration of compliance with Performance Standards, Settling Defendant shall monitor the Site including groundwater for a minimum of five years. If monitoring indicates that the Performance Standards are not being achieved at any time after groundwater extraction has been discontinued, extraction and treatment of the groundwater will recommence until the Performance Standards are once again achieved. If testing of treated soils indicates the

Performance Standards aren't achieved, EPA may reevaluate the effectiveness of the source control components.

#### D. Treatability Studies and Pilot Tests

The remedial design process will include treatability tests and pilot tests for the in-situ source treatment technologies. Settling Defendant shall evaluate through field applications the performance of ISGS and ISS/S relevant to Performance Standards for source treatment. Settling Defendant shall use the test results and site specific operating conditions in the detailed design of the selected remedy.

EPA will evaluate the results of treatability studies and pilot tests to determine whether the selected and designed treatment components will attain the Performance Standards. The specific details relating to the treatability-study and pilot-test requirements are covered in Section II, Task 2 of this SOW.

## **II. TASKS AND DELIVERABLES**

The specific scope of this work shall be documented in detail by Settling Defendant in a Remedial Design (RD) Work Plan and a Remedial Action (RA) Work Plan. The tasks listed below outline the major tasks that are expected and the required deliverables. Each activity and deliverable will apply for every remedy component listed in Section I.B. of this SOW. Plans, specifications, submittals, and other deliverables shall be subject to EPA review and approval in accordance with Section XI of the Consent Decree.

During the RD/RA process, Settling Defendant shall submit documentation of any need for additional data along with the proposed Data Quality Objectives (DQOs) whenever such requirements are identified. Settling Defendant is responsible for fulfilling additional data and analysis needs identified by EPA during the RD/RA process consistent with the general scope and objectives of the Consent Decree, including this SOW.

Settling Defendant shall perform the tasks described in the Subsections below. The tasks may be conducted simultaneously for each remedy component listed in Section I.B. of this SOW, in which case deliverables will comprehensively describe the plans, procedures, designs, and results applicable to all remedial components. Alternatively, Settling Defendant and EPA may agree to conduct the required tasks on an accelerated schedule for one or more remedy components. Any separation of task scheduling for particular remedy components will be clearly defined in the RD Work Plan prepared in Task 1.

#### Task 1 – RD Work Plan

Within 60 days after EPA's issuance of an authorization to proceed pursuant to Paragraph 10 of the Consent Decree, Settling Defendant shall submit a Remedial Design Work Plan to EPA for

review and approval. The RD Work Plan shall include a comprehensive description of the additional data collection and evaluation activities to be performed, if any, and the plans and specifications to be prepared. A comprehensive design management schedule for completion of each major activity and submission of each deliverable shall also be included.

Upon approval of the RD Work Plan, Settling Defendant shall implement the RD Work Plan in accordance with the design management schedule contained therein. Plans, specifications, submittals, and other deliverables shall be subject to EPA review and approval in accordance with Section XI of the Consent Decree. Review and/or approval of design submittals only allows Settling Defendant to proceed to the next step of the design process. It does not imply acceptance of later design submittals that have not been reviewed, nor that the remedy, when constructed, will meet Performance Standards.

As part of RD Work Plan preparation, Settling Defendant shall gather and evaluate the existing information regarding the Site and shall identify additional data that is required for RD. All existing Site data shall be thoroughly compiled and reviewed by Settling Defendant. Specifically, this shall include the ROD, RI/FS, and other available data related to the Site. This information shall be utilized in determining additional data needed for RD/RA implementation. Final decisions on the necessary data and DQOs shall be made by EPA.

The RD Work Plan shall present the following:

- A statement of the problem(s) and potential problem(s) posed by the Site and the objectives of the RD/RA.
- A background summary setting forth the following:
  - A brief description of the Site including the geographic location and the physiographic, hydrologic, geologic, demographic, ecological, and natural resource features;
  - A brief synopsis of the history of the Site including a summary of past disposal practices and a description of previous responses that have been conducted by local, State, Federal, or private parties;
  - A summary of the existing data including physical and chemical characteristics of the contaminants identified and their distribution among the environmental media at the Site.
- A list and detailed description of the tasks to be performed, information needed for each task, information to be produced during and at the conclusion of each task, and a description of the work products that shall be submitted to EPA. This description shall include the activities and deliverables set forth Tasks 2 through 5.

- A schedule with specific dates for completion of each required activity and submission of each deliverable required by the Consent Decree and this SOW. This schedule shall also include information regarding timing, initiation and completion of all critical path milestones for each activity and/or deliverable.
- A project management plan, including a data management plan, and provision for monthly reports to EPA, and meetings and presentations to EPA at the conclusion of each major phase of the RD/RA. The data management plan shall address the requirements for project management systems, including tracking, sorting, and retrieving the data along with an identification of the software to be used, minimum data requirements, data format and backup data management. The plan shall address both data management and document control for all activities conducted during the RD/RA.
- A description of the community relations support activities to be conducted during the RD. At EPA's request, Settling Defendant will assist EPA in preparing and disseminating information to the public regarding the RD work to be performed.

#### Task 2 – Pre-Design Investigation and Testing Plans

The Settling Defendant shall plan the necessary data gathering activities including sample collection, sample analysis, treatability tests, and pilot tests, in accordance with the data needs and pre-design tasks identified in the RD Work Plan. The Settling Defendant shall submit Pre-Design Investigation and Testing Plans that include:

- A **Health and Safety Plan** for the investigation and testing work. This Plan shall be prepared in conformance with Settling Defendant's health and safety program, and in compliance with OSHA regulations and protocols. The Health and Safety Plan shall include a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and provisions for site control. EPA will not approve Settling Defendant's Health and Safety Plan, but rather EPA will review it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment.
- A **Sampling and Analysis Plan (or Plans)** detailing procedures and requirements for all field sampling and laboratory testing to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data generated will meet the DQOs established. The SAP(s) shall include a Field Sampling and Analysis Plan (FSAP) and a Quality Assurance Project Plan (QAPP). The FSAP shall define in detail the sampling and data gathering methods that shall be used on the project. It shall include sampling objectives, sample location (horizontal and vertical) and frequency, sampling equipment and procedures, and sample handling and analysis. The FSAP shall be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and field information required. The QAPP shall describe the project objectives and organization, functional activities, and quality assurance and quality control (QA/QC) protocols that shall be used to achieve the desired

DQOs. The DQOs shall, at a minimum, reflect use of analytical methods for obtaining data of sufficient quality to meet National Contingency Plan requirements as identified at 300.435 (b). In addition, the QAPP shall address personnel qualifications, sampling procedures, sample custody, analytical procedures, and data reduction, validation, and reporting. These procedures must be consistent with the Region IV Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual and the guidance documents specified in Section VIII of the Consent Decree. Settling Defendant shall use laboratories qualified to conduct the proposed work and that meet the requirements specified in Section VIII of the Consent Decree. EPA may require that Settling Defendant submit detailed information to demonstrate that the laboratory is qualified to conduct the work, including information on personnel qualifications, equipment and material specification, and laboratory analyses of performance samples (blank and/or spike samples). In addition, EPA may require submittal of data packages equivalent to those generated by the EPA Contract Laboratory Program (CLP).

- **Pilot/Treatability Test Work Plans** for the on-Site field demonstration/testing of in-situ source treatment technologies (e.g., ISGS, ISS/S). These Work Plans will be submitted for EPA review and approval. The purpose of the Pilot and Treatability Tests is to determine if the source control technologies are capable of meeting Performance Standards. As provided for in the ROD, the Work Plans shall describe the technologies and methodologies to be tested, test objectives, procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, and residual waste management. The DQOs for the tests shall be documented as well. The Work Plans shall also describe field start up of pilot tests, operation and maintenance of equipment, and operating conditions to be tested. Permitting requirements shall be addressed if/as required. A schedule for performing the treatability/pilot tests shall be included with specific dates for the tasks. The Work Plans shall describe in detail the treatment process and how the proposed technology will meet the Performance Standards for the Site. Review and approval by EPA shall mean only that EPA considers the proposed technology and study approach appropriate for the remedy selected for the Site.

Settling Defendant may propose to conduct pilot- to full-scale implementation of ISS/S and ISGS in order to cost- and time-effectively implement these remedial components. In this case, the Pilot Test Work Plan will include a section describing the process by which full-scale implementation of the remedial technology will be undertaken shortly after completing the pilot test. The process for making design and procedure decisions in moving from the pilot test to full-scale implementation must be documented in the Pilot Test Work Plan and must include consultation with EPA. Planning documents for pilot- and full-scale construction activities will include the types of documents listed in Task 6, but specific to the work to be performed.

Settling Defendant shall discuss these plans with the EPA Remedial Project Manager (RPM) and, if needed, shall visit the Site with the EPA RPM to aid the discussion. EPA will review and comment on the Health and Safety Plan. EPA must review and approve the Sampling and Analysis Plan(s) and the Pilot/Treatability Test Work Plans before they are implemented.

### Task 3 – Pre-Design Investigation and Testing (Implementation)

The Settling Defendant shall carry out the data gathering activities described in the EPA-approved Pre-Design Sampling and Analysis Plan(s) and the Pilot/Treatability Test Plans (Task 2). Collected information shall be thoroughly documented for use in the subsequent RD tasks. QA/QC procedures shall be followed to ensure that DQOs are attained.

### Task 4 – Preliminary Design

Preliminary Design shall begin with initial design and shall end with the completion of approximately 30 percent of the design effort. At this stage, Settling Defendant shall field verify, as necessary, the existing conditions of the Site. The technical requirements of the Remedial Action shall be addressed and outlined so that they may be reviewed to determine if the final design will provide an effective remedy. Supporting data and documentation shall be provided with the design documents defining the functional aspects of the project. EPA approval of the Preliminary Design is required before proceeding with further design work, unless specifically authorized by EPA.

In accordance with the design management schedule established in the approved RD Work Plan, Settling Defendant shall submit to EPA the Preliminary Design submittal which shall consist of the following:

- Results of data acquisition activities. Data gathered during the pre-design investigation and testing phase shall be compiled, summarized, and submitted along with an analysis of the impact of the results on design activities. In addition, surveys conducted to establish topography, rights-of-way, easements, and utility lines shall be documented. Utility requirements and acquisition of access, through purchases or easements that are necessary to implement the RA shall also be discussed.
- Treatability/pilot test results and conclusions. Following completion of the in-situ treatment treatability/pilot tests, Settling Defendant shall document the performance of the technology to EPA for review. EPA will evaluate the results of the treatability/pilot tests for completeness and appropriateness based on site conditions. The test results shall indicate clearly the performance of the technologies compared with established Performance Standards. The documentation shall evaluate the treatment technologies' effectiveness, implementability, cost, and actual results as compared with predicted results. The documentation shall include an evaluation of full-scale application of the technology, including an analysis identifying the key parameters affecting full scale operation. Should the evaluation indicate that one or more tested technologies will meet the Performance Standards, the test results and operating conditions shall be used in the detailed design of the selected remedy. EPA approval of the treatability/pilot test documentation shall mean only that EPA finds the methodologies acceptable and documentation complete. EPA approval of the test results shall not imply or be construed to mean that EPA is warranting the performance of any technology. Should the

treatability/pilot test documentation not be approved by EPA, additional treatability/pilot tests may be required to fully evaluate available treatment systems.

- Design criteria. The concepts supporting the technical aspects of the design shall be defined in detail and presented. Specifically, the design criteria shall include the preliminary design assumptions and parameters, including:
  - Characterization of materials to be treated and contained
  - Volume of each media requiring treatment
  - Pretreatment requirements
  - Treatment schemes (including all media and by-products)
  - Estimated input/output rates
  - Influent and effluent qualities
  - Materials and equipment
  - Performance Standards
  - Long-term monitoring requirements
- Preliminary plans and specifications. Settling Defendant shall submit an outline of the required drawings, including preliminary sketches and layouts, describing conceptual aspects of the design, unit processes, etc. In addition, an outline of the required specifications, including Performance Standards, shall be submitted. Each component of remedy shall be addressed in the preliminary plans and specifications. Construction drawings shall reflect organization and clarity, and the scope of the technical specifications shall be outlined in a manner reflecting the final specifications. Preliminary design analyses shall also be included as appropriate.
- Plan for satisfying permitting requirements. All activities must be performed in accordance with the requirements of all applicable federal and state laws and regulations. Any off-site disposal shall be in compliance with the National Contingency Plan, Section 300.440. The plan shall identify the off-site disposal/discharge permits that are required, the time required to process the permit applications, and a schedule for submittal of the permit applications.
- Preliminary construction schedule. Settling Defendant shall develop a preliminary construction schedule for construction and implementation of the remedial action which identifies timing for initiation and completion of all critical path tasks subsequent to EPA approval of the Final Design and Remedial Action planning documents. Settling Defendant shall specifically identify expected durations to meet major milestones.

### Task 5 – Prefinal/Final Design

Settling Defendant shall submit the Prefinal Design when the design work is approximately 90 percent complete in accordance with the approved design management schedule. Settling Defendant shall address comments generated from the Preliminary Design review and clearly show any modification of the design as a result of incorporation of the comments. Essentially, the Prefinal Design shall function as the draft version of the Final Design.

After EPA review and comment on the Prefinal Design, the Final Design shall be submitted along with a memorandum indicating how the Prefinal Design comments were incorporated into the Final Design. All Final Design documents shall be certified by a Professional Engineer registered in the State of Florida. EPA written approval of the Final Design is required before initiating the RA, unless specifically authorized by EPA. The following items shall be submitted with or as part of the Prefinal/Final Design:

- Complete design analyses. The selected design shall be presented along with an analysis supporting the design approach. Design calculations shall be included.
- Final plans and specifications. A complete set of construction drawings and specifications shall be submitted which describe the selected design.
- Final construction schedule. Settling Defendant shall submit a final construction schedule to EPA for approval.
- Construction Cost Estimate. An estimate within +15 percent to -10 percent of actual construction costs shall be submitted.

### Task 6 – Remedial Action Planning

Concurrent with the submittal of the Final Design, Settling Defendant shall submit a Remedial Action Work Plan, Project Delivery Strategy, Construction Management Plan, Construction Quality Assurance Plan, and Construction Health and Safety Plan/Contingency Plan. The RA Work Plan, Project Delivery Strategy, Construction Management Plan, and Construction Quality Assurance Plan must be reviewed and approved by EPA. The Construction Health and Safety Plan/Contingency Plan must be reviewed by EPA prior to the initiation of the Remedial Action.

Additional details regarding the RA planning submittal(s) are provided below:

- **RA Work Plan:** A work plan which provides a detailed plan of action for completing the RA activities shall be submitted to EPA for review and approval. The objective of this work plan is to provide for the safe and efficient completion of the RA. The RA Work Plan shall be developed in conjunction with the Project Delivery Strategy, Construction Management Plan, the Construction Quality Assurance Plan, and the Construction Health and Safety Plan/Contingency Plan, although each plan may be delivered under separate cover. The RA Work Plan shall include a comprehensive

description of the work to be performed and the final construction schedule for completion of each major activity and submission of each deliverable.

Specifically, the RA Work Plan shall present the following:

- A detailed description of the tasks to be performed and a description of the work products to be submitted to EPA. This includes the RA activities and deliverables set forth in the remainder of this SOW and required by the Consent Decree.
  - A project management plan, including provision for monthly reports to EPA and meetings and presentations to EPA at the conclusion of each major phase of the RA. EPA's Project Coordinator and the Settling Defendant's Project Coordinator will meet, at a minimum, on a quarterly basis, unless EPA determines that such meeting is unnecessary. Meetings may take place via conference call in lieu of face-to-face where both the Settling Defendant and EPA agree to do so.
  - A description of the community relations support activities to be conducted during the RA. At EPA's request, Settling Defendant shall assist EPA in preparing and disseminating information to the public regarding the RA work to be performed.
- **Project Delivery Strategy:** Settling Defendant shall submit a document to EPA for review and approval describing the strategy for delivering the project. This document shall address the management approach for implementing the Remedial Action, including procurement methods and contracting strategy, phasing alternatives, and contractor and equipment availability concerns. If the construction of the remedy is to be accomplished by Settling Defendant's "in-house" resources, the document shall identify those resources.
- **Construction Management Plan:** A Construction Management Plan shall be developed to indicate how the construction activities are to be implemented and coordinated with EPA during the RA. Settling Defendant shall designate a person to be a Remedial Action Coordinator and its representative on-Site during the Remedial Action, and identify this person in the Plan. This Plan shall also identify other key project management personnel and lines of authority, and provide descriptions of the duties of the key personnel along with an organizational chart. In addition, a plan for the administration of construction changes and EPA review and approval of those changes shall be included.
- **Construction Quality Assurance Plan:** Settling Defendant shall develop and implement a Construction Quality Assurance Program to ensure, with a reasonable degree of certainty, that the completed Remedial Action meets or exceeds all design criteria, plans and specifications, and Performance Standards. The Construction Quality Assurance Plan shall incorporate relevant provisions of the Performance Standards Verification Plan (see Task 10). At a minimum, the Construction Quality Assurance Plan shall include the following elements:

- A description of the quality control organization, including a chart showing lines of authority, identification of the members of the Independent Quality Assurance Team (IQAT), and acknowledgment that the IQAT will implement the control system for all aspects of the work specified and shall report to the project coordinator and EPA. The IQAT members shall be representatives from testing and inspection organizations and/or the Supervising Contractor and shall be responsible for the QA/QC of the Remedial Action. The members of the IQAT shall have a good professional and ethical reputation, previous experience in the type of QA/QC activities to be implemented, and demonstrated capability to perform the required activities. They shall also be independent of the construction contractor.
- The name, qualifications, duties, authorities, and responsibilities of each person assigned a QC function.
- Description of the observations and control testing that will be used to monitor the construction and/or installation of the components of the Remedial Action. This includes information which certifies that personnel and laboratories performing the tests are qualified and the equipment and procedures to be used comply with applicable standards. Any laboratories to be used shall be specified. Acceptance/Rejection criteria and plans for implementing corrective measures shall be addressed.
- A plan and schedule for managing submittals, testing, inspections, and any other QA function (including those of contractors, subcontractors, fabricators, suppliers, purchasing agents, etc.) that involve assuring quality workmanship, verifying compliance with the plans and specifications, or any other QC objectives. Inspections shall verify compliance with all environmental requirements and include, but not be limited to, air quality and emissions monitoring records and waste disposal records, etc.
- Reporting procedures and reporting format for QA/QC activities including such items as daily summary reports, schedule of data submissions, inspection data sheets, problem identification and corrective measures reports, evaluation reports, acceptance reports, and final documentation.
- A list of definable features of the work to be performed. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements.
- **Construction Health and Safety Plan/Contingency Plan:** Settling Defendant shall prepare a Construction Health and Safety Plan/Contingency Plan in conformance with Settling Defendant's health and safety program, and in compliance with OSHA regulations and protocols. The Construction Health and Safety Plan shall include a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and site control. EPA will not approve Settling Defendant's

Construction Health and Safety Plan/Contingency Plan, but rather EPA will review it to ensure that all necessary elements are included, and that the plan provides for the protection of human health and the environment. This plan shall include a Contingency Plan and incorporate Spill Control and Countermeasures Plans if determined by EPA to be applicable for the Site. This plan shall also include an Air Monitoring Plan.

- The Contingency Plan is to be written for the onsite construction workers and the local affected population. It shall include the following items:
  - Name of person who will be responsible in the event of an emergency incident.
  - Plan for initial site safety indoctrination and training for all employees, name of the person who will give the training, and the topics to be covered.
  - Plan and date for meeting with the local community, including local, state, and federal agencies involved in the cleanup, as well as the local emergency squads and the local hospitals.
  - A list of the first aid and medical facilities including: location of first aid kits, names of personnel trained in first aid, a clearly marked map with the route to the nearest medical facility, all necessary emergency phone numbers conspicuously posted at the job site (i.e., fire, rescue, local hazardous material teams, National Emergency Response Team, etc.).
  - Plans for protection of public and visitors to the job site.
- The Air Monitoring Plan will incorporate the following requirements:
  - Air monitoring shall be conducted both on Site and at the perimeter of the Site. The chemical constituents that are identified as Constituents of Concern in the ROD shall serve as a basis of the sampling. Settling Defendant shall clearly identify the methods, parameters, detection limits, and action levels required to ensure that airborne vapors and particulates/dust do not pose significant risk to receptors. Air monitoring shall include personnel monitoring, on-Site area monitoring, and perimeter monitoring.
  - Personnel monitoring shall be conducted according to OSHA and NIOSH regulations and guidance.
  - On-Site area monitoring shall consist of periodic, real-time monitoring performed immediately adjacent to any waste excavation areas, treatment areas, and any other applicable areas when work is occurring. Measurements shall be taken in the breathing zones of personnel and immediately upwind and downwind of the work areas. Equipment shall

include the following, as applicable: organic vapor meter, explosion meter, particulate (dust) monitoring equipment, and onsite windsock.

- Perimeter Monitoring shall consist of monitoring concentrations of dust and (as applicable) certain chemical compounds at the perimeter of the Site. EPA approved methods shall be used for sampling and analysis of air at the Site perimeter. The results of the perimeter air monitoring shall be compared to pre-established action levels. When action levels are exceeded, work practices will be adjusted to reduce concentrations and/or appropriate engineering controls will be implemented. Settling Defendant shall report airborne concentration data to EPA in accordance with Section X of the Consent Decree.
- The Spill Control and Countermeasures Plan shall include the following:
  - Contingency measures for potential spills and discharges from materials handling and/or transportation.
  - A description of the methods, means, and facilities required to prevent contamination of soil, water, atmosphere, and uncontaminated structures, equipment, or material by spills or discharges.
  - A description of the equipment and personnel necessary to perform emergency measures required to contain any spillage and to remove spilled materials and soils or liquids that become contaminated due to spillage. This collected spill material must be properly disposed of.
  - A description of the equipment and personnel to perform decontamination measures that may be required for previously uncontaminated structures, equipment, or material.

A Preconstruction Conference shall be held after selection of the construction contractor but before initiation of construction. This conference shall include Settling Defendant and federal, state and local government agencies and shall:

- Define the roles, relationships, and responsibilities of all parties;
- Review methods for documenting and reporting inspection data;
- Review methods for distributing and storing documents and reports;
- Review work area security and safety protocols;
- Review the Construction Schedule;
- Conduct a site reconnaissance to verify that the design criteria and the plans specifications are understood and to review material and equipment storage locations.

The Preconstruction Conference must be documented, including names of people in attendance, issues discussed, clarifications made, special instructions issued, etc.

#### Task 7 – Remedy Construction

Upon approval of the Final Design and the RA Work Plan, Settling Defendant shall implement the RA Work Plan in accordance with the construction management schedule. Significant field changes to the RA as set forth in the RA Work Plan and Final Design shall not be undertaken without the approval of EPA. The RA shall be documented in enough detail to produce as-built construction drawings after the RA is complete. Deliverables shall be submitted to EPA for review and approval in accordance with Section XI of the Consent Decree. Review and/or approval of submittals does not imply acceptance of later submittals that have not been reviewed, nor that the remedy, when constructed, will meet Performance Standards.

EPA shall conduct Prefinal and Final inspections after completion of the construction of the remedy or major remedy components

- **Prefinal Construction Inspection:** Upon preliminary project completion, Settling Defendant shall notify EPA for the purpose of conducting a Prefinal Construction Inspection. Participants should include the Project Coordinators, Supervising Contractor, Construction Contractor, and other federal, state, and local agencies with a jurisdictional interest. The Prefinal Inspection shall consist of a walk-through inspection of the entire project site. The objective of the inspection is to determine whether the construction is complete and consistent with the Consent Decree. Any outstanding construction items discovered during the inspection shall be identified and noted on a punch list. A Prefinal Construction Inspection Report shall be submitted by Settling Defendant which outlines the outstanding construction items, actions required to resolve the items, completion date for the items, and an anticipated date for the Final Inspection.
- **Final Construction Inspection:** Upon completion of all outstanding construction items, Settling Defendant shall notify EPA for the purpose of conducting a Final Construction Inspection. The Final Construction Inspection shall consist of a walk-through inspection of the entire project site. The Prefinal Construction Inspection Report shall be used as a check list with the Final Construction Inspection focusing on the outstanding construction items identified in the Prefinal Construction Inspection. Confirmation shall be made during the Final Construction Inspection that all outstanding items have been resolved. Any outstanding construction items discovered during the inspection still requiring correction shall be identified and noted on a punch list. If any items are still unresolved, the inspection shall be considered to be a Prefinal Construction Inspection requiring another Prefinal Construction Inspection Report and subsequent Final Construction Inspection.

## Task 8 – RA Documentation

Settling Defendant will document completion of the Remedy Construction in a Final Construction Report and Remedial Action Report.

- **Final Construction Report:** Following the conclusion of the Final Construction Inspection, Settling Defendant shall submit a Final Construction Report, in accordance with the schedule provided in the RA Work Plan. EPA will review the draft report and will provide comments to Settling Defendant. The Final Construction Report shall include the following:
  - Brief description of how outstanding items noted in the Prefinal Inspection were resolved;
  - Explanation of modifications made during the RA to the original RD and RA Work Plans and why these changes were made;
  - As-built drawings;
  - Synopsis of the construction work defined in the SOW and certification that the construction work has been completed.
- **Remedial Action Report:** As provided in Section XIV of the Consent Decree, within 90 days after Settling Defendant concludes that the Remedial Action has been fully performed and the Performance Standards have been attained, Settling Defendant shall so certify to the United States and shall schedule and conduct a pre-certification inspection to be attended by EPA and Settling Defendant. If after the pre-certification inspection Settling Defendant still believes that the Remedial Action has been fully performed and the Performance Standards have been attained, Settling Defendant shall submit a Remedial Action Report to EPA in accordance with Section XIV of the Consent Decree. The RA Report shall include the following:
  - A copy of the Final Construction Report;
  - A synopsis of the work defined in this SOW and a demonstration in accordance with the Performance Standards Verification Plan (see Task 10) that Performance Standards have been achieved;
  - Certification that the Remedial Action has been completed in full satisfaction of the requirements of the Consent Decree, and;
  - A description of how Settling Defendant will implement any remaining part of the EPA approved Operation and Maintenance Plan (see Task 9).

After EPA review, Settling Defendant shall address any comments and submit a revised report. As provided in Section XIV of the Consent Decree, the Remedial Action shall not be considered complete until EPA approves the RA Report.

#### Task 9 – Operation and Maintenance

Operation and Maintenance (O&M) of remedy components and technologies shall be performed in accordance with the approved Operation and Maintenance Plan and per the procedures documented in the Operation and Maintenance Manual. General O&M requirements shall be included in the preliminary, prefinal, and final design packages. The Operation and Maintenance Plan and Manual shall be submitted during remedy construction per the schedule identified in the RA Work Plan.

- **Operation and Maintenance Plan:** At approximately the 30 percent construction stage (or as otherwise defined in the RA Work Plan), Settling Defendant shall submit an Operation and Maintenance Plan for review. The Operation and Maintenance Plan must be reviewed and approved by EPA prior to initiation of Operation and Maintenance activities. If necessary, the Operation and Maintenance Plan shall be modified to incorporate any design modifications implemented during the Remedial Action. This plan shall describe start-up procedures, operation, troubleshooting, training, and evaluation activities that shall be carried out by Settling Defendant. The plan shall address the following elements:
  - Equipment start-up and operator training:
    - Technical specifications governing treatment systems;
    - Requirements for providing appropriate service visits by experienced personnel to supervise the installation, adjustment, start-up and operation of the systems; and,
    - Schedule for training personnel regarding appropriate operational procedures once start-up has been successfully completed.
  - Description of normal operation and maintenance:
    - Description of tasks required for system operation;
    - Description of tasks required for system maintenance;
    - Description of prescribed treatment or operating conditions; and
    - Schedule showing the required frequency for each O&M task.
  - Description of potential operating problems:

- Description and analysis of potential operating problems;
- Sources of information regarding problems; and
- Common remedies or anticipated corrective actions.
- Description of routine operation monitoring and laboratory testing:
  - Description of monitoring tasks;
  - Description of required laboratory tests and their interpretation;
  - Required QA/QC; and
  - Schedule of monitoring frequency and date, if appropriate, when monitoring may cease.
- Description of alternate O&M:
  - Should system fail, alternate procedures to prevent undue hazard; and
  - Analysis of vulnerability and additional resource requirements should a failure occur.
- Health and Safety Plan:
  - Description of precautions to be taken and required health and safety equipment, etc., for site personnel protection, and
  - Safety tasks required in the event of systems failure.
- Description of equipment:
  - Equipment identification;
  - Installation of monitoring components;
  - Maintenance of site equipment; and
  - Replacement schedule for equipment and installation components.
- Records and reporting:
  - Daily operating logs;
  - Laboratory records;
  - Records of operating cost;

- Mechanism for reporting emergencies;
  - Personnel and Maintenance Records; and
  - Monthly reports to State/Federal Agencies.
- Soil Management Plan (for any future construction).
- **Operation and Maintenance Manual:** At approximately the 30 percent construction stage (or as otherwise defined in the RA Work Plan), Settling Defendant shall submit an O&M Manual for review. This manual shall include all necessary O&M information for the operating personnel. The O&M manual must be reviewed and approved by EPA prior to initiation of O&M activities.

After approval of the Operation and Maintenance Plan and the Operation and Maintenance Manual, Settling Defendant shall implement the Operation and Maintenance Plan in accordance with the schedule contained therein.

#### Task 10 - Performance Monitoring

Performance monitoring shall be conducted to ensure that all Performance Standards are met.

Settling Defendant shall submit a Performance Standards Verification Plan to EPA in accordance with the schedule identified in the RD Work Plan. Preliminary details of the Performance Standards Verification Plan will be included with the Preliminary Remedial Design deliverable. Prefinal and Final versions of the Performance Standards Verification Plan will be included with the Prefinal and Final Design.

The purpose of the Performance Standards Verification Plan is to provide a mechanism to ensure that both short-term and long-term Performance Standards for the Remedial Action are met. Guidance documents used in developing the Sampling and Analysis Plan during the Remedial Design phase shall be used. Once approved, Settling Defendant shall implement the Performance Standards Verification Plan on the approved schedule. The Performance Standards Verification Plan shall include:

- The Performance Standards Verification Field Sampling and Analysis Plan (FSAP) that provides guidance for all fieldwork by defining in detail the sampling and data gathering methods to be used. The Performance Standards Verification FSAP shall be written so that a field sampling team unfamiliar with the Site would be able to gather the samples and field information required.
- The Performance Standards Verification Quality Assurance/Quality Control Plan that describes the quality assurance and quality control protocols which will be followed in demonstrating compliance with Performance standards.

- Specification of those tasks to be performed by Settling Defendant to demonstrate compliance with the Performance Standards and a schedule for the performance of these tasks.

### **III. REFERENCES**

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RD/RA process. EPA shall provide, and Settling Defendant shall review these guidance documents and shall use the information provided therein in performing the RD/RA and preparing all deliverables under this SOW. NOTE GREEN SHADED AREAS - EPA SHOULD REVIEW AND PROVIDE THE RECOMMENDED GUIDANCE DOCS.

1. "National Oil and Hazardous Substances Pollution Contingency Plan, Final Rule", Federal Register 40 CFR Part 300, March 8, 1990 (Assume latest version. Has been updated since 1990).
2. "Superfund Remedial Design and Remedial Action Guidance," U.S. EPA, Office of Emergency and Remedial Response, June 1986, OSWER Directive No. 9355.O-4A.
3. "Interim Final Guidance on Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties," U.S. EPA, Office of Emergency and Remedial Response, February 14, 1990, OSWER Directive No. 9355.5-01.
4. "Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final," U.S. EPA, Office of Emergency and Remedial Response, October 1988, OSWER Directive No. 355.3-01.
5. "A Compendium of Superfund Field Operations Methods," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, EPA/540/P-87/001a, August 1987, OSWER Directive No. 9355.0-14.
6. "EPA NEIC Policies and Procedures Manual," EPA-330/9-78-001-R, May 1978, revised November 1984.
7. "Data Quality Objectives for Remedial Response Activities," U.S. EPA, Office of Emergency and Remedial Response and Office of Waste Programs Enforcement, EPA/540/G-87/003, March 1987, OSWER Directive No. 9335.0-7B.
8. "Guidelines and Specifications for Preparing Quality Assurance Project Plans," U.S. EPA, Office of Research and Development, Cincinnati, OH, QAMS-004/80, December 29, 1980.
9. "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans," U.S. EPA, Office of Emergency and Remedial Response, QAMS-005/80, December 1980.

10. "Users Guide to the EPA Contract Laboratory Program," U.S. EPA, Sample Management Office, August 1982.
11. "Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual," U.S. EPA Region IV, Environmental Services Division, February 1, 1991, (revised periodically).
12. "USEPA Contract Laboratory Program Statement of Work for Organics Analysis," U.S. EPA, Office of Emergency and Remedial Response, February 1988.
13. "USEPA Contract Laboratory Program Statement of Work for Inorganics Analysis," U.S. EPA, Office of Emergency and Remedial Response, July 1988.
14. "Quality in the Constructed Project: A Guideline for Owners, Designers, and Constructors, Volume 1, Preliminary Edition for Trial Use and Comment," American Society of Civil Engineers, May 1988.
15. "Interim Guidance on Compliance with Applicable or Relevant and Appropriate Requirements," U.S. EPA, Office of Emergency and Remedial Response, July 9, 1987, OSWER Directive No. 9234.0-05.
16. "CERCLA Compliance with Other Laws Manual," Two Volumes, U.S. EPA, Office of Emergency and Remedial Response, August 1988 (Draft), OSWER Directive No. 9234.1-01 and -02.
17. "Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites," U.S. EPA, Office of Emergency and Remedial Response, (Draft), OSWER Directive No. 9283.1-2.
18. "Guide for Conducting Treatability Studies Under CERCLA," U.S. EPA, Office of Emergency and Remedial Response, Pre-publication Version.
19. "Health and Safety Requirements of Employees Employed in Field Activities," U.S. EPA, Office of Emergency and Remedial Response, July 12, 1981, EPA Order No. 1440.2.
20. "Standard Operating Safety Guides," U.S. EPA, Office of Emergency and Remedial Response, November 1984.
21. "Standards for General Industry," 29 CFR Part 1910, Occupational Health and Safety Administration.
22. "Standards for the Construction Industry," 29 CFR 1926, Occupational Health and Safety Administration.

23. "NIOSH Manual of Analytical Methods," 2d edition. Volumes I - VII, or the 3rd edition, Volumes I and II (ON-LINE VERSION NOW; UPDATED OFTEN), National Institute of Occupational Safety and Health.
24. "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities," National Institute of Occupational Safety and Health/Occupational Health and Safety Administration/United States Coast Guard/ Environmental Protection Agency, October 1985.
25. "TLVs - Threshold Limit Values and Biological Exposure Indices for 1987 - 88," American Conference of Governmental Industrial Hygienists.
26. "American National Standards Practices for Respiratory Protection," American National Standards Institute Z88.2-1980, March 11, 1981.
27. "Quality in the Constructed Project - Volume 1," American Society of Civil Engineers, 1990.

#### **IV. SUMMARY OF MAJOR DELIVERABLES**

The list below is a summary of the major deliverables for the remedial design and remedial action at the Koppers portion of the Cabot Carbon/Koppers Superfund Site:

- Remedial Design Work Plan
- Pre-Design Investigation and Testing Plans:
  - Health and Safety Plan
  - Sampling and Analysis Plan(s)
  - Pilot/Treatability Testing Plan(s)
- Preliminary Design
- Prefinal Design
- Final Design
- Remedial Action Work Plan, including (or along with):
  - Project Delivery Strategy
  - Construction Management Plan
  - Construction Quality Assurance Plan

- Construction Health and Safety/Contingency Plan
- Prefinal Construction Inspection Report
- Final Construction Report
- Remedial Action Report
- Operation and Maintenance Plan and Operation and Maintenance Manual
- Performance Standards Verification Plan

These deliverables shall be submitted to EPA per the schedules described in this SOW, the Consent Decree, the RD Work Plan, and the RA Work Plan.

Deliverables may be submitted to EPA electronically in PDF format by email attachment, CD, DVD, or through use of an internet site accessible by EPA and its designees. If and as directed by EPA, Settling Defendant will provide up to ten copies of any deliverables submitted by CD or DVD. If an internet site is used, maintenance of that site and provision for EPA access will be the responsibility of Settling Defendant. If and as directed by EPA, Settling Defendant will provide up to ten paper copies of deliverables or portions thereof. In case of paper-copy deliverables, one copy shall be unbound and the remainder shall be bound.

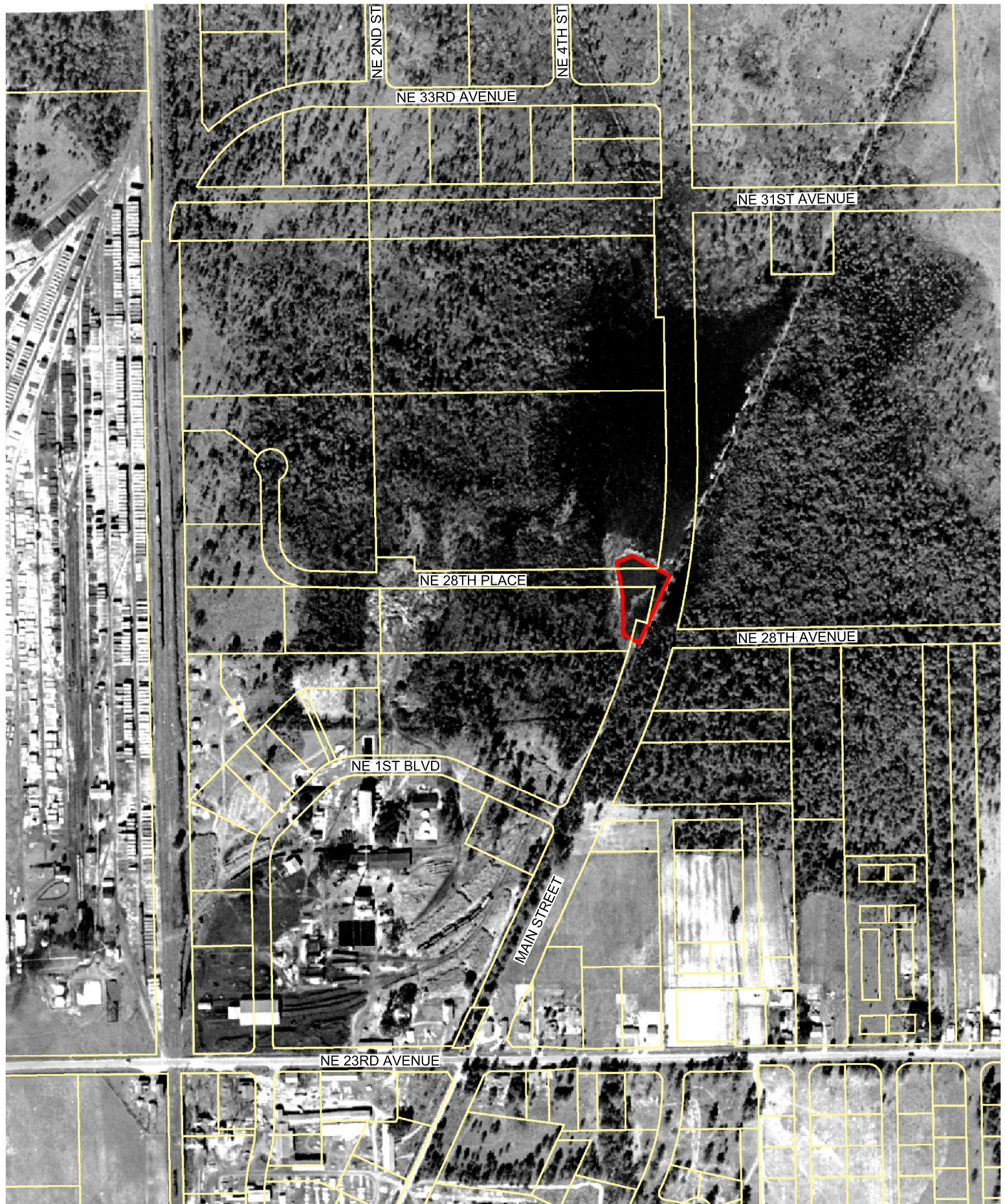
EPA will review and comment on each major deliverable. Unless otherwise noted in this SOW, EPA approval of a plan is required before it can be implemented, and EPA approval of a deliverable is required before moving on to the next phase of design, construction, or operation.

**UNITED STATES OF AMERICA v. BEAZER EAST, INC.**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF FLORIDA  
GAINESVILLE DIVISION

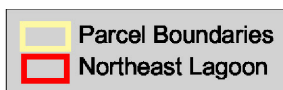
Appendix C-1

Northeast Lagoon Map



Cabot Carbon/Koppers  
Superfund Site in Gainesville, FL  
2/11/1949

Photo Source: NARS/ASCS



200 0 200 Feet

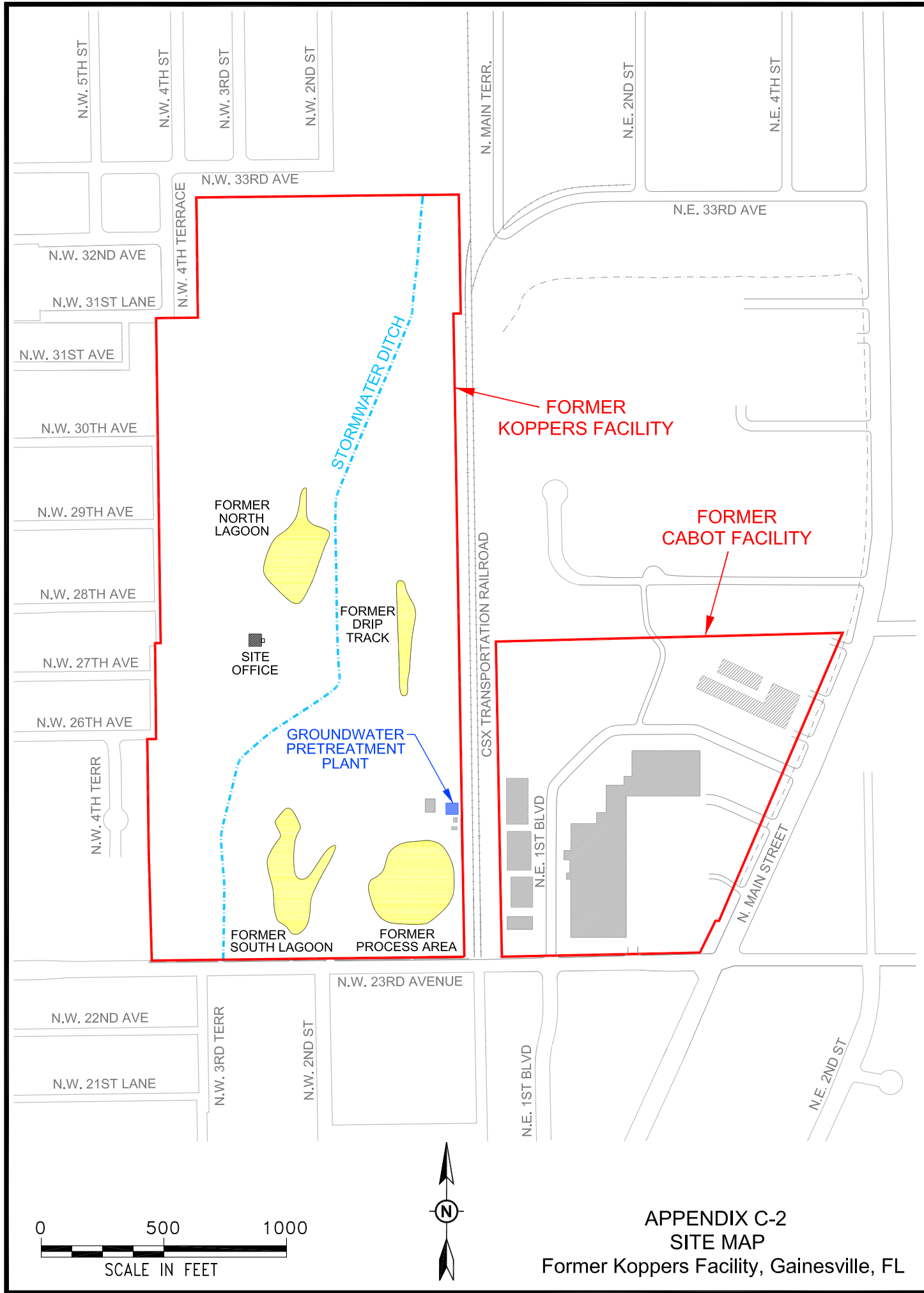


**UNITED STATES OF AMERICA v. BEAZER EAST, INC.**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF FLORIDA  
GAINESVILLE DIVISION

Appendix C-2

Site Map



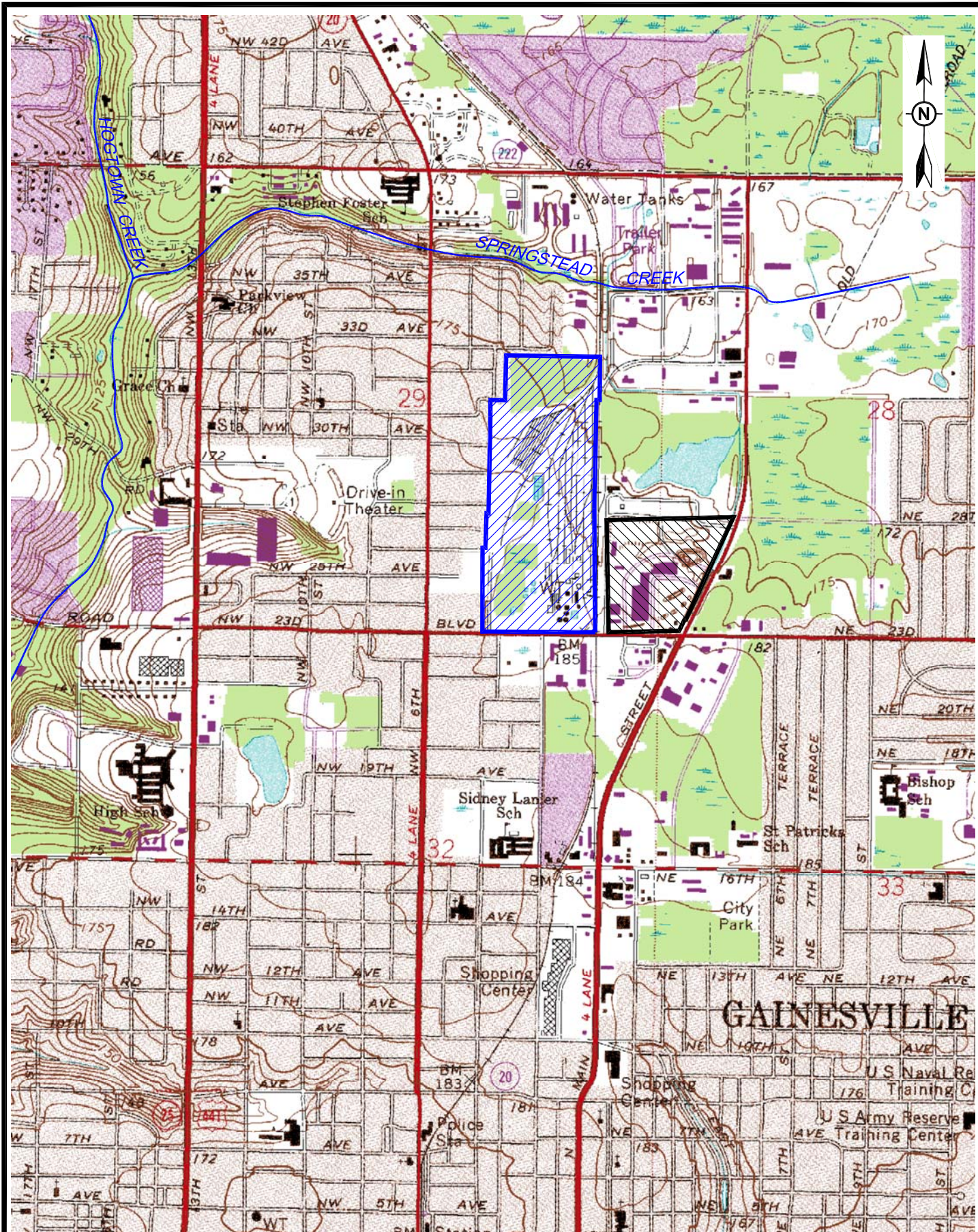
APPENDIX C-2  
SITE MAP  
Former Koppers Facility, Gainesville, FL

**UNITED STATES OF AMERICA v. BEAZER EAST, INC.**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF FLORIDA  
GAINESVILLE DIVISION

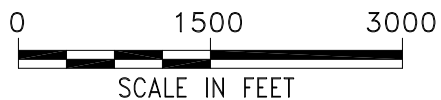
Appendix D



Boundary Map



SOURCE: U.S.G.S. QUADRANGLE GAINESVILLE  
EAST, FLA 1966 (PHOTOREVISED 1988)

NOTE:  
FEATURES SHOWN AT FORMER KOPPERS FACILITY  
DO NOT REFLECT CURRENT CONDITIONS.



- LEGEND**
-  FORMER KOPPERS FACILITY
  -  FORMER CABOT FACILITY

**APPENDIX D**  
**BOUNDARY MAP**  
Former Koppers Facility, Gainesville, FL

**UNITED STATES OF AMERICA v. BEAZER EAST, INC.**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF FLORIDA  
GAINESVILLE DIVISION

Appendix E

Warranty Deed

Return to:  
**Chicago Title Insurance Co.**  
495 State Road 436  
Casselberry, Florida 32707

This Instrument Prepared By *1530620921*  
and return to:  
Charles I. Holden, Jr., Esquire  
Holden, Rappenecker & Eubank, P.A.  
2772-S NW 43<sup>rd</sup> Street  
Gainesville, FL 32606  
File #8928.002(09-272)

Recording Fee: \$52.50  
Documentary Stamps: \$1,750.00

Property Appraiser's Parcel ID#00000-365-057 and 08250-000-000

RECORDED IN OFFICIAL RECORDS  
INSTRUMENT # 2565930 6 PGS  
Apr 02, 2010 10:13 AM  
BOOK 3948 PAGE 385  
J. K. IRBY  
Clerk Of Circuit Court  
Alachua County, Florida  
CLERK13 Receipt # 438849

Doc Stamp-Deed: \$1,750.00



2565930 6 PGS

**SPECIAL WARRANTY DEED**

**THIS INDENTURE**, made this 30<sup>th</sup> day of March, 2010, between KOPPERS INC., a Pennsylvania corporation (formerly known as Koppers Industries Inc.), with business address of 436 Seventh Avenue, Pittsburgh, Pennsylvania 15219 ("Grantor") and BEAZER EAST, INC., a Delaware corporation, with business address of One Oxford Centre, Suite 3000, Pittsburgh, Pennsylvania 15219 ("Grantee").

WITNESSETH, that Grantor, for and in consideration of the sum of Ten and no/100 Dollars (\$10.00), and other good and valuable consideration to Grantor in hand paid by Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to Grantee, and Grantee's successors and assigns forever, the following described land, situate, lying and being in Alachua County, Florida, to-wit:

Property set forth on **Exhibit "A"**, which is attached hereto and by reference incorporated in and made a part hereof.

SUBJECT TO the following exceptions:

1. Ad valorem real property taxes for 2010 and subsequent years.
2. Any encumbrances, easements or restrictions of record (other than tax liens, liens, mortgages, security interests or judgments), and as set forth on **Exhibit "B"** herewith which is attached hereto and by reference incorporated in and made a part hereof.

AND, the Grantor does hereby covenant and warrant with said Grantee that it is lawfully seized of said land in fee simple; that it has good, right and lawful authority to sell and convey said land; and that it has not done or suffered anything whereby said land has been encumbered in any way, except as may be aforesaid.

IN WITNESS WHEREOF, Grantor has hereunto set Grantor's corporate seal and had this document signed in its name by its duly authorized president, vice president or chief executive officer, in the presence of the two below-identified witnesses.

WITNESS #1

By: Janet L. Shaffer  
Name: JANET L. SHAFER  
Address: 436 Seventh Ave  
Pgh, PA 15219

GRANTOR: KOPPERS INC, a

Pennsylvania corporation

By: Steven R. Lacy  
Name: Steven R. Lacy  
Title: Senior Vice President  
Address: 436 Seventh Avenue  
Pittsburgh, PA 15219

WITNESS #2

By: Rose Marie Hilinski  
Name: Rose Marie Hilinski  
Address: 436 Seventh Ave  
Pgh, PA 15219

(Grantor's Seal)

(affix seal)

COMMONWEALTH OF PENNSYLVANIA )

) SS:

COUNTY OF ALLEGHENY )

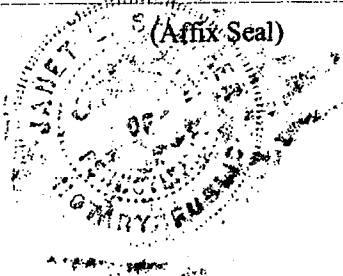
On this, the 30th day of March, 2010, before me, a Notary Public in and for the County and State noted above, personally appeared Steven R. Lacy, Senior Vice President of KOPPERS INC, a Pennsylvania corporation, who is personally known to me; or who produced:

(If not personally known, check applicable box)

- ☐ Driver's License issued within five (5) years from date; or  
☐ Other: \_\_\_\_\_ as identification

and who is also known to me to be the SENIOR VICE PRESIDENT of KOPPERS, INC., a Pennsylvania corporation, that subscribed to the within instrument, and acknowledged that the same is the free and voluntary act and deed of said corporation, for the purposes therein contained, and on oath stated that he was authorized, with full corporate authority, to execute said instrument on behalf of said corporation.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.



Notary Public:

Typed Name: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal  
Janet L. Shaffer, Notary Public  
City of Pittsburgh, Allegheny County  
My Commission Expires Nov. 5, 2013  
Member, Pennsylvania Association of Notaries

EXHIBIT 'A'

Parcel 1

A parcel of land in Section 29, Township 9 South, Range 20 East, Gainesville, Alachua County, Florida, more particularly described as follows:

Commence at a point on the South line of Section 29, Township 9 South, Range 20 East, 60 feet West of the centerline of the Seaboard Coast Line Railroad Right-of-Way, said point being 748.5 feet West of the SE corner of said Section, thence run N 1°01'04" W along the West Right of Way of said railroad 33 feet to the North Right of Way of State Road No. 232-A, being the North Right of Way of NW 23<sup>rd</sup> Avenue and the P.O.B., thence run S 89°13'56" W along said North Right-of-Way 1271.5 feet, thence run N. 0°40'55" W 1287.0 feet to a fence corner, thence run N. 89°13'56" E 40.3 feet to a concrete monument, thence run N. 0°20'24" W 1325.41 feet to a concrete monument on the North line of the SE 1/4 of said Section, thence run N 89°15'36" E along said North line 168.53 feet to the SE corner of Lot 12 of Pine Haven Extension as recorded in Plat Book "D", page 56, of the public records of Alachua County, Florida, thence run N. 0°48'03" W along the Boundary of said subdivision 488.5 feet to a concrete monument at the SW corner of Lot 6 of said Subdivision, thence run N 89°17'43" E, along the South line of said Subdivision and an Easterly extension thereof 1067.60 feet to a concrete monument on the West Right-of-Way of said Railroad, (60' R/W), thence run S 1°01'04" E along said Right-of-Way 487.85 feet, thence run S 89°15'36" W 30 feet, thence run S 1°01'04" E along said Right-of-Way 2611.79 feet (120' R/W) to the North Right of Way of NW 23<sup>rd</sup> Avenue and the P.O.B. Being and lying in Section 29, Township 9 South, Range 20 East, Gainesville, Alachua County, Florida.

Parcel 2

The East One-half (E 1/2) of the following described property:

Commence at a point being on the westerly right-of-way line of N.W. 4<sup>th</sup> Terrace lying 12 feet south of the south right-of-way line of N.W. 30<sup>th</sup> Avenue, (being the point-of-beginning), thence run east to the east right-of-way line of N.W. 4<sup>th</sup> Terrace thence run south along said east right-of-way line to a point 12 feet north of the north right-of-way line of N.W. 29<sup>th</sup> Avenue, thence run West to the West right-of-way line of the aforementioned N.W. 4<sup>th</sup> Terrace thence run north along said West right-of-way line to the Point of Beginning, and close. Being and lying in the City of Gainesville, Florida.

EXCEPTING THEREFROM THE FOLLOWING:

That part of Section 29, Township 9 South, Range 20 East, Gainesville, Alachua County, Florida, being the easterly 1/2 of that portion of Northwest 4<sup>th</sup> Terrace that was vacated by City of Gainesville Ordinance No. 3244 as recorded in Official Records Book 1641, Page 1418 of the Public Records of said Alachua County, and being more particularly described as follows:

Commence at an existing iron pipe that marks the northeast corner of Lot 25 of Block "C" of GAINESVILLE HEIGHTS, a subdivision as per plat thereof recorded in Plat Book "A", page 160 of said public records for a point of reference; thence S. 01 deg. 07 min. 25 sec. E. along the east line of said Lot 25 and along the westerly right-of-way line of said Northwest 4<sup>th</sup> Terrace, a distance of 12.00 feet; thence N. 88 deg. 52 min. 35 sec. E, perpendicular to the preceding line, a distance of 13.04 feet to the POINT OF BEGINNING; thence continue N 88 deg. 52 min. 35 sec. E, a distance of 13.04 feet to an intersection with the easterly right-of-way line of said Northwest 4<sup>th</sup> Terrace; thence S. 00 deg. 56 min. 27 sec. E, along said easterly right-of-way line, a distance of 274.26 feet, thence S 88 deg. 52 min. 35 sec. W, a distance of 12.61 feet; thence N. 01 deg. 01 min. 56 sec. W, a distance of 274.26 feet to the POINT OF BEGINNING.

Grantor hereby further quit claims to Grantee, without warranty of any kind, any and all right, title and interest that the Grantor might have in that certain property described in the survey dated the 23<sup>rd</sup> day of September, 1988, revised the 4<sup>th</sup> day of October, 1988, performed by M.K. Flowers, Inc.

INSTRUMENT # 2565930 6 PGS

**EXHIBIT B**

**Permitted Encumbrances**

1. Easement, covenants and restrictions of record and recorded with the Clerk of Court of Alachua County, Florida as of the Effective Date, including but not necessarily limited to the following:
  - (a) State Road Department Drainage Easement as described in that certain instrument dated March 3, 1969, filed March 6, 1969 and recorded in Official Records Book 559, page 449 of the Public Records of Alachua County, Florida. (As to Parcel 1 as described in Exhibit "A")
  - (b) Ten (10') foot Gainesville Gas Co. Easement as shown on Survey dated November 20, 1981 by Johnson and MacLean, Land Surveyors, Reg. Fla. Cert. No. 2047. (As to Parcel 1 as described in Exhibit "A")
  - (c) Twenty (20') foot Sewer Easement to City of Gainesville as shown on Survey dated November 20, 1981 by Johnson and MacLean, Land Surveyors, Reg. Fla. Cert. No. 2047. (As to Parcel 1 as described in Exhibit "A")
  - (d) Terms of the Easements and Reservations in Ordinance No. 3244 in Official Records Book 1641, page 1418. (Parcel 2 as described in Exhibit "A")
  - (e) Easement to City of Gainesville as described in that certain instrument dated September 14, 1994, filed October 14, 1994 and recorded in Official Records Book 1984, Page 2047 of the Public Records of Alachua County, Florida
  - (f) Recitals as shown in that certain Deed from Seaboard Coast Line Railroad Company, to Koppers Company, Inc., dated September 17, 1982, filed October 6, 1982 and recorded in Official Records Book 1440, page 334 of the Public Records of Alachua County, Florida. (As to Parcel 1 as described in Exhibit "A")
2. Taxes and Assessments for the year 2010 and subsequent years.
3. Unilateral Administrative Order For Remedial Design and Remedial Action, filed April 25, 1991 in Official Records Book 1809, Page 0019 of the Public Records of Alachua County, Florida.
4. Facts as reflected on that certain survey of the Property dated October 4, 1988, and prepared by M.K. Flowers, Inc., 3131 NW 13<sup>th</sup> Street, Suite 62, P.O. Box 1281, Gainesville, Florida, 32602.

NOTE:

**THE WARRANTIES AS SET FORTH IN THIS SPECIAL WARRANTY DEED SHALL NOT APPLY TO THE FOLLOWING PORTION OF THE PROPERTY DESCRIBED IN THE ATTACHED EXHIBIT 'A':**

- (1) Strip of Land approximately 6 feet wide lying North of fence and south of south line of Lot 12, Pine Haven Extension and line extending Westerly from Southwest corner of Lot 12, Pine Haven Extension to East line of tract herein described as shown on Survey dated November 20, 1981 by Johnson and MacLean (Note: Pine Haven Extension is recorded in Plat Book "D", Page 56.) (As to Parcel 1 as described in Exhibit "A")
- (2) Strip of land across North end of the property described in Exhibit "A" being North of a line described as "Beginning 4.14 feet South of NE corner of said tract and run Westerly to a point 5.41 feet South of Northwest corner of said tract, said line being approximately 1067.60 feet in length".

**UNITED STATES OF AMERICA v. BEAZER EAST, INC.**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF FLORIDA  
GAINESVILLE DIVISION

**Appendix F**

Proprietary Controls

This instrument prepared by:

Babst, Calland, Clements, & Zomnir P.C.  
Two Gateway Center  
Pittsburgh, PA 15626

## DECLARATION OF RESTRICTIVE COVENANT

THIS DECLARATION OF RESTRICTIVE COVENANT (hereinafter "Declaration") is given this \_\_\_\_ day of \_\_\_\_\_, 201 \_\_, by Beazer East, Inc., (hereinafter "Grantor") and the State of Florida Department of Environmental Protection (hereinafter "FDEP" or "Grantee").

### RECITALS

- A. Grantor is the fee simple owner of that certain real property situated in the County of Alachua, State of Florida, more particularly described in Exhibit "A" attached hereto and made a part hereof (hereinafter the "Property").
- B. The United States Environmental Protection Agency (hereinafter "EPA") has determined that the Property subject to this Declaration contains contamination resulting from releases of substances at the facility known as the Cabot-Koppers Superfund Site ("Site") located northwest of the intersection of NW 23<sup>rd</sup> Avenue and North Main Street in Gainesville, Florida. The Site has been designated by the EPA as a National Priorities List site under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601 *et seq.* ("CERCLA"), and the National Oil and Hazardous Substances Contingency Plan, 40 C.F.R. Part 300 ("NCP"), thereby subjecting the Site to EPA's jurisdiction for purposes of approval and implementation of environmental response actions.
- C. The nature and extent of contaminants on and under the Site, as well as the remedial actions deemed necessary by the EPA to address such contaminants, is documented in an Amended Record of Decision dated February 2011 (the "ROD"), which was issued by EPA pursuant to its authority under CERCLA. The EPA has selected certain remedial actions for the Site, including certain actions that must be implemented at the Property, which are detailed in the ROD and some of which will be performed after the recordation of this Declaration.
- D. The ROD referenced in Recital C above indicates that contaminated soil and/or groundwater as defined by Chapter 62-780, Florida Administrative Code ("F.A.C."), exists on the Property. Contaminant levels in excess of allowable concentrations for unrestricted use will remain at the Property after completion of the remedial actions selected by EPA and required by the ROD.

- E. It is the intention of all parties that the EPA is a third party beneficiary of the Property use restrictions and access covenants established by this Declaration, and that said restrictions and covenants shall be enforceable by EPA, by Grantee and by their respective successor agencies.
- H. Grantor has agreed: 1) to impose on the Property use restrictions as covenants that will run with the land for the purpose of protecting human health and the environment; and 2) to grant an irrevocable right of access over the Property to EPA, Grantee and their agents or representatives for purposes of monitoring the remedial action selected in the ROD; and
- I. Grantor deems it desirable and in the best interest of all present and future owners of the Property that the Property be held subject to the below-stated restrictions and covenants, that will run with the land, for the purpose of protecting human health and the environment, all of which are more particularly hereinafter set forth.

NOW THEREFORE, Grantor, on behalf of itself, its successors, its heirs, and assigns, in consideration of the recitals above, the terms of the ROD, and other good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, does hereby covenant and declare that the Property shall be subject to the restrictions on use set forth below, which shall touch and concern and run with the title of the Property, and does give, grant, and convey: 1) an irrevocable use restriction of the nature and character hereinafter set forth, for the purposes set forth herein; (2) a Property access covenant of the nature and character hereinafter set forth, for the purposes set forth herein; and 3) the perpetual right to enforce said covenants and use restrictions with respect to the Property. Grantor further agrees as follows:

- a. The foregoing recitals are true and correct and are incorporated herein by reference.
- b. Grantor hereby imposes on the Property the following restrictions:
  - 1. **Restrictions on use:** The following covenants, conditions, and restrictions apply to the use of the Property:
    - a. Contaminated groundwater shall not be used for potable purposes except as otherwise approved by EPA or FDEP, or until then-applicable State groundwater standards or the groundwater cleanup standards identified in the ROD are met. Nothing in this provision shall prevent the use of groundwater for irrigation and/or dust suppression in conformance with plans or practices approved by EPA or FDEP.
    - b. Other than as necessary to implement the remedial action contemplated by the ROD, or as otherwise approved by EPA or FDEP, there shall be no drilling for the purpose of withdrawing groundwater from beneath the Property. In addition, no monitoring wells shall be installed on the Property absent the approval of EPA or FDEP. **[FDEP**

**& EPA can add or delete well construction criteria on a site-specific basis at the Scoping Meeting]**

- c. Attached as Exhibit B, and incorporated by reference herein, is a survey map identifying the size and location of existing stormwater swales, stormwater detention or retention facilities and ditches as such features currently exist on the Property. Such existing stormwater and drainage features may be altered, modified, or expanded only in conjunction with the remedial action contemplated by the ROD or as otherwise approved by EPA or FDEP.
- d. Dewatering activities must be conducted pursuant to a plan submitted to and approved by the EPA or FDEP, in order to address and ensure the appropriate handling, treatment, and disposal of any extracted surface water or groundwater that may be contaminated.
- e. As long as the levels of contamination detected at the Property remain in excess of allowable concentrations for unrestricted use, or in the absence of either (1) EPA or FDEP-approved institutional or engineering controls designed to prevent human exposure to such contamination, or (2) a determination by EPA or FDEP that all exposure pathways to such contamination are incomplete, the Property shall only be used for industrial purposes. During such time and/or in the absence of such controls or such determination, there shall be no agricultural use of the land, including forestry, fishing and mining; no hotels or lodging; no recreational uses, including amusement parks, parks, camps, museums, zoos, or gardens; no residential uses, and no educational uses such as elementary and secondary schools, or day care services. **[FDEP & EPA can add or delete restrictions on a site-specific basis at the Scoping Meeting]** These restrictions may be modified pursuant to Paragraph 3 of this Declaration.
- f. Engineering controls on the Property shall be placed and maintained as contemplated by the ROD or as otherwise approved by EPA or FDEP during the remedial action contemplated by the ROD. This restriction may be modified pursuant to Paragraph 3 of this Declaration. Should future development require the disturbance of such engineering controls on the Property, EPA or FDEP may approve alternative controls or additional response actions at such time .
- g. For any construction activities, a plan must be submitted and approved by the EPA or FDEP to address and ensure the appropriate management of any contaminated soil that may be encountered.
- h. For any soil disturbance activities (including, but not limited to soil excavation and soil borings), a plan must be submitted and approved by the EPA or FDEP to address and ensure the appropriate handling, treatment, and disposal of any disturbed soil that may be contaminated.

2. **Irrevocable Covenant for Site Access:** Grantor hereby grants to EPA and the FDEP, and their respective agents and representatives, an irrevocable, permanent and continuing right of access at all reasonable times to the Property for purposes of:
- a) Verifying any data or information submitted to the EPA and the FDEP;
  - b) Verifying that no action is being taken on the Property in violation of the terms of this instrument or of any federal or state environmental laws or regulations;
  - c) Monitoring response actions on the Site and conducting investigations relating to contamination on or near the Site, including, without limitation, sampling of air, water, sediments, soils, and specifically, without limitation, obtaining split or duplicate samples; and
  - d) Conducting periodic reviews of the remedial action, including, but not limited to, reviews required by applicable statutes and/or regulations.
3. **Modification:** This Declaration shall not be modified, amended, or terminated without the written consent of the FDEP or its successor agency. The FDEP shall not consent to any such modification, amendment or termination without the written consent of the EPA.
4. (a) **Reserved rights of Grantor:** Grantor hereby reserves unto itself, its successors, its heirs, and assigns, all rights and privileges in and to the use of the Property which are not incompatible with the restrictions, rights, and covenants granted herein.
- (b) **Reserved Rights of the EPA:** Nothing in this document shall limit or otherwise affect the EPA's rights of entry and access or the EPA's authority to take response actions under CERCLA, the NCP, or other federal law.
- (c) **Reserved Rights of the FDEP:** Nothing in this document shall limit or otherwise affect the FDEP's rights of entry and access or authority to act under state or federal law.
5. **Notice requirement:** Grantor agrees to include in any instrument conveying any interest in any portion of the Property, including, but not limited to deeds, leases and mortgages, a notice which is in substantially the following form:

**NOTICE: THE INTEREST CONVEYED HEREBY IS  
SUBJECT TO A DECLARATION OF RESTRICTIVE AND  
AFFIRMATIVE COVENANTS, DATED \_\_\_\_\_,  
201\_\_\_\_, RECORDED IN THE PUBLIC LAND RECORDS ON  
\_\_\_\_\_, 20\_\_\_\_, IN BOOK \_\_\_\_\_, PAGE \_\_\_\_\_, IN  
FAVOR OF, AND ENFORCEABLE BY, THE STATE OF**

**FLORIDA DEPARTMENT OF ENVIRONMENTAL  
PROTECTION.**

Within thirty (30) days of the date any such instrument of conveyance is executed, Grantor must provide the FDEP and the EPA with a certified true copy of said instrument and, if it has been recorded in the public land records, its recording reference.

6. **Enforcement:** The Grantee shall be entitled to enforce the terms of this instrument by resort to specific performance or legal process. These restrictions may also be enforced in a court of competent jurisdiction by any other person, firm, corporation, or governmental agency that is substantially benefited by this Declaration. All remedies available hereunder shall be in addition to any and all other remedies at law or in equity, including CERCLA. It is expressly agreed that the EPA is not the recipient of a real property interest, but is a third party beneficiary of the Declaration of Restrictive Covenants, and, as such, has the right of enforcement. Enforcement of the terms of this instrument shall be at the discretion of the entities listed above, and any forbearance, delay or omission to exercise its rights under this instrument in the event of a breach of any term of this instrument shall not be deemed to be a waiver by the Grantee of such term or of any subsequent breach of the same or any other term, or of any of the rights of the Grantee under this instrument.
8. **Damages:** Grantee shall be entitled to recover damages for violations of the terms of this instrument, or for any injury to the remedial action, to the public, or to the environment protected by this instrument.
9. **Waiver of certain defenses:** Grantor hereby waives any defense of laches, estoppel, or prescription.
10. **Covenants:** Grantor hereby covenants to and with Grantee that Grantor is lawfully seized in fee simple of the Property, that the Grantor has a good and lawful right and power to sell and convey it or any interest therein, and that the Property is free and clear of encumbrances, except those noted on **Exhibit C** attached hereto.
11. **Notices:** Any notice, demand, request, consent, approval, or communication that either party desires or is required to give to the other shall be in writing and shall either be served personally or sent by first class mail, postage prepaid, referencing the Site name (i.e. "Cabot-Koppers Superfund Site") and Site ID number (i.e. "FLD 004 057 535") and addressed as follows:

To Grantor:

Beazer East, Inc.  
c/o Three Rivers Management, Inc.  
Manor Oak One Ste. 200

To Grantee:

Bureau Chief, Waste Cleanup  
FDEP M.S. 4505  
600 Blair Stone Road

1900 Cochran Road  
Pittsburgh, PA 15220  
Attn: Legal Counsel

Tallahassee, FL 32399

To EPA:

U.S. EPA, Region 4  
Waste Management Division  
Superfund Remedial and Technical Services Branch  
Section Chief, Section D  
61 Forsyth Street, SW  
Atlanta, GA 30303

12. **Recording in Land Records:** Grantor shall record this Declaration of Restrictive and Affirmative Covenants in timely fashion in the Official Records of Alachua County, Florida, with no encumbrances other than those noted in Exhibit C, and shall rerecord it at any time Grantee may require to preserve its rights. Grantor shall pay all recording costs and taxes necessary to record this document in the public records.

13. **General provisions:**

- a) **Controlling law:** The interpretation and performance of this instrument shall be governed by the laws of the United States or, if there are no applicable federal laws, by the law of the state where the Property is located.
- b) **Liberal construction:** Any general rule of construction to the contrary notwithstanding, this instrument shall be liberally construed in favor of the grant to effect the purpose of this instrument and the policy and purpose of CERCLA. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this instrument that would render the provision valid shall be favored over any interpretation that would render it invalid. If any provision of this instrument is found to restrict, impede, interfere with or conflict with the ROD, then the requirements of the ROD supersede any such conflicting provision in this instrument.
- c) **Severability:** If any provision of this instrument, or the application of it to any person or circumstance, is found to be invalid, the remainder of the provisions of this instrument, or the application of such provisions to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.
- d) **Entire Agreement:** This instrument sets forth the entire agreement of the parties with respect to rights and restrictions created hereby, and supersedes all prior discussions, negotiations, understandings, or agreements relating thereto, all of which are merged herein.
- e) **No Forfeiture:** Nothing contained herein will result in a forfeiture or reversion of

Grantor's title in any respect.

f) Joint Obligation: If there are two or more parties identified as Grantor herein, the obligations imposed by this instrument upon them shall be joint and several.

g) Successors: The term "Grantor," wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantor" and their personal representatives, heirs, successors, and assigns. The term "Grantee," wherever used herein, and any pronouns used in place thereof, shall include the persons and/or entities named at the beginning of this document, identified as "Grantee" and their personal representatives, heirs, successors, and assigns. The rights of the Grantee and Grantor under this instrument are freely assignable, subject to the notice provisions hereof.

h) Captions: The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

i) Counterparts: The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

**TO HAVE AND TO HOLD** unto the State of Florida Department of Environmental Protection and its successors and assigns forever.

**IN WITNESS WHEREOF**, Grantor has caused this Agreement to be signed in its name.

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

GRANTOR: \_\_\_\_\_  
For Beazer East, Inc.

Signed, sealed and delivered in the presence of:

\_\_\_\_\_  
Witness: \_\_\_\_\_ Print Name \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
Witness: \_\_\_\_\_ Print Name \_\_\_\_\_ Date \_\_\_\_\_

**COMMONWEALTH OF PENNSYLVANIA**

**COUNTY OF ALLEGHENY**

On this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, the undersigned, a Notary Public in and for the Commonwealth of Pennsylvania, duly commissioned and sworn, personally appeared \_\_\_\_\_, known to be the \_\_\_\_\_ of Beazer East, Inc., the corporation that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute said instrument.

Witness my hand and official seal hereto affixed the day and year written above.

\_\_\_\_\_  
Notary Public in and for the  
Commonwealth of Pennsylvania

My Commission Expires: \_\_\_\_\_

Approved as to form by the Florida Department of Environmental Protection, Office of General Counsel.

\_\_\_\_\_  
Assistant General Counsel

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION**

By: \_\_\_\_\_

Signed, sealed and delivered in the presence of:

\_\_\_\_\_  
Witness: \_\_\_\_\_ Print Name \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_  
Witness: \_\_\_\_\_ Print Name \_\_\_\_\_ Date \_\_\_\_\_

**STATE OF FLORIDA  
COUNTY OF ALACHUA**

On this \_\_\_\_ day of \_\_\_\_\_, 201\_\_\_\_, before me, the undersigned, a Notary Public in and for the State of Florida, duly commissioned and sworn, personally appeared \_\_\_\_\_,

known to be the Secretary of the Florida Department of Environmental Protection, the State Agency that executed the foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said Agency, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute said instrument.

Witness my hand and official seal hereto affixed the day and year written above.

\_\_\_\_\_  
Notary Public in and for the  
State of Florida

My Commission Expires: \_\_\_\_\_.

Attachments: Exhibit A - Legal Description of the Property  
Exhibit B - Survey Map  
Exhibit C - Existing Liens and Encumbrances on the Property  
(to be determined through/by title examination)

**UNITED STATES OF AMERICA v. BEAZER EAST, INC.**

UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF FLORIDA  
GAINESVILLE DIVISION

## Appendix G

Certification of Insurance in Support of Performance Guarantee

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## Appendix G

A certification of insurance, as specified in Paragraph 44(g)(1)(ii) of this Consent Decree, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

### CERTIFICATION OF INSURANCE

Name and Address of Insurer (herein called the “Insurer”): \_\_\_\_\_

Name and Address of Insured (herein called the “Insured”): \_\_\_\_\_

Estimated Remaining Cost of Work: \_\_\_\_\_

Face Amount of Policy: \_\_\_\_\_

Remaining Liability Limit of Policy: \_\_\_\_\_

Policy Number: \_\_\_\_\_

Effective Date: \_\_\_\_\_

The Insured hereby certifies that the Insurer has issued to the Insured the policy of insurance identified above to provide financial assurance for remedial work pursuant to that certain Remedial Design/Remedial Action Consent Decree for the Cabot/Koppers Superfund Site, entered by the United States of America and Beazer East, Inc. on [insert date], CERCLA Docket No. [insert docket number] (the “Agreement”). The Insured certifies as follows in accordance with Paragraph 44(g) of the Agreement:

1. the amount of the current remaining liability under the policy of insurance identified above is as noted above;
2. the applicable Estimated Remaining Cost of the Work as defined by the Agreement is as noted above;
3. the issuer of the policy of insurance identified above does / does not (circle one) currently comply with relevant licensing requirements applicable to Bermuda Monetary Authority Class I insurers;
4. the current rating by AM Best or a comparable rating agency of the entities providing reinsurance for the policy of insurance identified above is as follows:  
\_\_\_\_\_; and
5. There has / has not (circle one) been a rating change, an outlook change, or a rating being placed under review for the entities providing reinsurance for the policy of insurance identified above.

I hereby certify that the wording of this certificate is substantially similar to the wording specified in Appendix F to the Agreement.

---

Signature of Insured's Treasurer

---

Name of person signing

---

Title of person signing

Signature of witness or notary: \_\_\_\_\_ Date: \_\_\_\_\_