



December 9, 2013

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Via Email: [kestle.rusty@epa.gov](mailto:kestle.rusty@epa.gov)

Subject: **Response to Comments on the Remedial Design Work Plan, Version 1**  
Cabot/Koppers Superfund Site, Gainesville, Florida, EPA ID: FLD980709356

Dear Mr. Kestle:

On behalf of Beazer East, Inc. (Beazer), this letter provides responses to EPA comments transmitted by your letter dated November 7, 2013, on Beazer's Remedial Design Work Plan (RDWP) Version 1, which was submitted on September 20, 2013. The RDWP pertains to Cabot/Koppers Superfund Site ("Site") and specifically the Koppers portion of Operable Units Two through Five for which Beazer has remedial-design and remedial-action responsibilities per the July 9, 2013 Consent Decree between Beazer and the United States government.

Along with these responses, an updated version (Version 2) of the RDWP is being submitted for your review, as requested. The updated RDWP includes modifications to address EPA comments as indicated below. The updated RDWP also includes a current schedule in Appendix A.

**EPA Comment #1:** On page 9, there is an incorrect description of the 2011 Record of Decision (ROD) requirements as it is related to the Lower Hawthorn groundwater treatments:

"Contingent treatment actions in the HG (ISCO/ISGS)"

The correct remedy description from the 2011 ROD is as follows:

"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."

Please correct this error and resubmit the document.

**Response:** Agreed. This eastern-boundary treatment via new wells was inadvertently omitted from the summary list in Version 1 of the RDWP. The list has been amended in the updated RDWP to include this remediation component. Please note that Section 2.6.1.2 of the RDWP provides additional description of this component and includes the eastern-boundary treatment (unchanged from Version 1).

**EPA Comment #2:** On page 16 (pdf page 23), the following verbiage is included addressing possible sediment remediation activities:

"2.3.1.3 Off-Property Sediment Removal

Pending delineation and natural attenuation evaluation, sediment removal may be needed to meet cleanup goals in the ditch that runs from the Property to Springstead Creek. Removed sediment may be placed in the soil consolidation area.

Pursuant to the 2011 Amended ROD, natural attenuation may be evaluated for any sediment with Site-related concentrations exceeding cleanup goals in the ditch that runs from the Property to Springstead Creek, and in Springstead Creek. Sediment may remain in place if it can be demonstrated that cleanup goals will be met through natural attenuation and that human exposure to impacted sediments will not result in unacceptable risk."

This verbiage does not accurately portray Beazer East's responsibility as it relates to the cleanup of sediments in the ditch, Springstead, or Hogtown Creeks. The 2011 Record of Decision previously set distinct cleanup goals for these sediments and stipulated what those cleanup goals will be and at what contaminant levels sediment will be

allowed to remain in place (threshold effects concentrations (TEC)) for natural attenuation processes to address these contaminant concentrations. Furthermore, this language impermissibly limits Beazer East's responsibility as it relates to Site contaminants which may be present in Hogtown Creek. To EPA's knowledge, Beazer East has not collected data with which to draw a conclusion that contaminants associated with Koppers previous operations are not required to be addressed. No further risk assessment activities are needed nor would be accepted by EPA for this activity. Please update this language to reflect the existence of the distinct cleanup levels stipulated in the 2011 Record of Decision.

**Response:** The text has been modified in the updated version of the RDWP to clarify the remedial action component scope and clearly state the Amended ROD cleanup goals and ROD requirements. The updated text also notes that Beazer will be responsible for sediment removal in Springstead Creek and Hogtown Creek if sediment concentrations are found to be above cleanup levels and these impacts are found to be related to the former Koppers operations. This is consistent with the Consent Decree. No additional risk assessment is planned.

**EPA Comment #3:** On page 19 (pdf page 27), the following verbiage addresses ISGS treatments in the former South Lagoon:

“2.4.2 South Lagoon

The RD process for ISGS in the former South Lagoon source area will be a separate, streamlined version of the process employed for the former Process Area. It is envisioned that the RD process for the former South Lagoon will begin as the design is being finalized for the former Process Area. **No pilot test will be needed for the former South Lagoon.**”

The 2011 Record of Decision requires a full-scale pilot test in the former South Lagoon prior to full-scale implementation. Please update this language to require a pilot-scale test at the former South Lagoon.

**Response:** Per Section 2.4.1.3 of the RDWP, an ISGS pilot test is planned which will meet the requirement of the Amended ROD. The planned pilot test is in the former Process Area which has more creosote NAPL but is otherwise similar in nature to the former South Lagoon. The two source areas are also in close proximity. Beazer expects that the results from the former Process-Area pilot test and the initial results from full-scale implementation of ISGS in the former Process Area will obviate the need for an additional pilot test at the former South Lagoon. The information gained from the former Process-Area work will be used to: (1) determine the likely effectiveness of ISGS treatment in the former South Lagoon and (2) develop design details for implementation in the South Lagoon. Nonetheless, Beazer will conduct an additional pilot test at the former South Lagoon if it is deemed necessary after completion of pilot test and ISGS injections at the former Process Area.

The text has been updated to reflect this response. See Section 2.4.2.2.

**EPA Comment #4:** On page 21 (pdf page 28), the following language appears related to the application of ISSS in the former North Lagoon and Drip Track area:

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 HG (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 per the Materials Management Plan. The final depth of ISS/S treatment will be based on characterization data and pilot tests designed to determine the Site-specific practical depth limit of effective ISS/S application. **ISGS may be used below ISS/S if ISS/S cannot reasonably be used to treat to the full target depth.**”

The highlighted language is contrary to the 2011 Record of Decision, ISSS is required to be completed from ground surface to the middle Hawthorn Clay layer. Please remove the highlighted language.

**Response:** The highlighted language has been removed in the updated RDWP.

**EPA Comment #5:** On Figure 5, please show where you intend for the performance monitoring wells to go. They are shown on the cross section on Figure 6, but not Figure 5.

**Response:** The specific locations of performance monitoring wells have not yet been determined, so they cannot be shown on the map in Figure 5. Specific locations will be determined during the Remedial Design process. Figure 6 is a conceptual figure that includes monitoring wells to convey the concept that they will be downgradient of the treatment and containment components of the remedial action.

**EPA Comment #6:** On Figure 6, what are the black dashed lines shown in the Upper Hawthorne Aquifer (UHA) flanking the in situ geochemical stabilization (ISGS) and in situ solidification/stabilization (ISS/S) areas?

**Response:** These lines were intended to conceptually show the lateral edges of the source treatment zones. The figure has been revised in Version 2 to better convey the remediation components.

**EPA Comment #7:** Section 2.3 indicates that a low permeability cap will be installed over the consolidation area at the time the barrier wall is installed. However, Section 2.6 also indicates that a cap will be installed in this same area as part of the final cover after the ISGS and ISS/S are completed.

- a. Is the intention to install some form of low permeability cap at the same time as the barrier wall? This cap will be destroyed during the ISGS/ISS implementation.
- b. Is the intention to wait until the final site work is completed to install the low permeability cap? Installing a barrier wall without capping it for a long period of time (the schedule implies that it could be as much as 2 years) is a recipe for the wall to be overtopped by contaminated Surficial Aquifer groundwater. How will groundwater be handled during this time to prevent the barrier wall from being overtopped by contaminated surficial groundwater?

**Response:** The low-permeability cover/cap will be completed after completion of ISGS and ISS/S implementation. The text in Section 2.3 has been corrected to make that clear.

There will be a period of time between cutoff-wall installation and cover/cap installation. During that time, the existing groundwater collection drains will continue to operate to control water levels within the zone enclosed by the cutoff wall. Text has been added to address this point.

**EPA Comment #8:** We suggest doing additional compatibility testing during your barrier wall study to determine if DNAPL presence in soils or groundwater that will be in contact with the barrier wall will cause any issues with the materials tested.

**Response:** Agreed. Text has been added in Section 2.3.2.1 to include this activity.

Please contact me if you have any questions or concerns about these responses or the accompanying Version 2 of the RDWP.

Sincerely,



Gregory W. Council, P.E.  
Principal Engineer

Accompanied by: RDWP Version 2

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