

# Beazer

BEAZER EAST, INC. C/O THREE RIVERS MANAGEMENT, INC.  
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October 15, 2010

Mr. Scott Miller  
Remedial Project Manager  
Superfund Division  
Superfund Remedial Branch  
Section C  
U.S. EPA Region 4  
61 Forsyth Street, SW  
Atlanta, GA 30303

**Re: Transmittal of Comments  
July 15, 2010 USEPA Proposed Plan  
Cabot Carbon/Koppers Superfund Site, Gainesville Florida**

Dear Mr. Miller:

Beazer East Inc. ("Beazer") appreciates the opportunity to provide its comments on the above referenced document. Beazer requests that its comments be carefully reviewed and considered, and that the comments be placed in the administrative record for the Site.

As you are aware, Beazer has extensive experience in the environmental remediation of former wood treatment sites. For this site, Beazer has retained an extremely well qualified group of technical consultants and experts to work on the various aspects of this site. For reference, I have attached the resumes of the consultants and experts who have been involved in the most recent feasibility studies, risk assessments, and remedy selection discussions. Collectively, this group has hundreds of years of environmental experience, much of which has been related specifically to the remediation of wood treatment sites.

Also, Beazer has developed, in cooperation with and approval by USEPA and FDEP, an extensive amount of site specific data and information upon which the current selection of a remedial action at the site can be based. As an illustrative example of the site specific data developed, I have attached a recent site figure which shows the current array of groundwater monitoring points available at the site. Since 2003, Beazer has invested over \$20 million dollars developing this data and information. The development of this site specific data and information allows for an informed and educated decision to be made at the site relative to the prospective remedy.

Furthermore, Beazer believes that this information enables it to understand and appreciate the complex nature of this site. The remedy components selected for the site must fit together synergistically to ensure that true risk reduction is actually effectuated and that future risks are mitigated. As provided in the attached comments, Beazer has some significant reservations about individual aspects of the Proposed Plan, and where

appropriate has recommended suitable alternatives. That being said, Beazer remains committed to the implementation of a protective remedy, one which relies upon containment, isolation, treatment and long term monitoring, and is appropriate for the conditions existing at the site.

Finally, Beazer understands the local stakeholders' frustration with the time this process has taken, and their desire to have the site remediation simply be finished. Beazer also wants to get to the end of the project as expeditiously as is reasonably possible. However, there is no simple solution to the puzzle presented by conditions at the site. The data collected from the site documents its complex nature and the need for a sophisticated, long term approach. Beazer, through its efforts, has demonstrated that it is fully committed to resolving environmental matters at this site and that it remains fully committed to a remedial approach that will support its and the community's efforts to restore the site to a position where it may once again, become a positive attribute of the surrounding community.

Again, thank you for your full consideration to our comments, and if I can be of further assistance or answer additional questions, please do not hesitate to contact me.

Sincerely,



Robert Markwell  
President, Beazer East, Inc.

Cc: Lisa Jackson, USEPA Administrator  
Gwendolyn Keyes Fleming, USEPA Region IV Administrator  
Stanley Meiburg, USEPA Region IV Deputy Administrator  
Kelsey Helton, FDEP  
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Congresswomen Corrine Brown  
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Craig Lowe, Mayor City of Gainesville  
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Marion Radson Gainesville City Attorney  
Dave Wagner Alachua County Attorney  
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Bob Hunzinger, General Manger GRU

Beazer East, Inc. (Beazer) hereby submits its comments to the Superfund Proposed Plan (Proposed Plan) for the former Koppers portion (Site) of the Cabot Carbon/Koppers Superfund Site (Superfund Site)<sup>1</sup> issued on July 15, 2010 by the United States Environmental Protection Agency (EPA). The deadline for comments to the Proposed Plan was extended to October 15, 2010.

As set forth below, Beazer has both legal and technical concerns with the Proposed Plan. On the technical side, Beazer's primary concerns with the Proposed Plan are in the following areas:

- The implementation of source treatment components (ISS/S and ISBS)
- The proposed remedies for off-Site creek sediments and soils
- EPA's selection of cleanup goals and related criteria

Beazer's legal concerns are primarily with the various off-Site components of the Proposed Plan, and, to a lesser degree, with EPA's communications to the public that may have had the unintended effect of creating the impression that the foreseeable future use of the Site may include an "unrestricted residential" component. In sum, the EPA's selection of remedial alternatives for off-Site sediments is arbitrary and capricious because EPA has not developed the information it is required to evaluate under the Remedial Investigation/Feasibility Study (RI/FS) process set out in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300, nor has EPA appropriately evaluated such information. EPA should also reconsider its selection of Florida's default residential Soils Cleanup Target Levels (SCTLs) as off-Site cleanup standards in consideration of Beazer's recently-submitted "Derivation Of Off-Site Site-Specific Residential SCTLs" document. Finally, while Beazer continues to cooperate with EPA and the local governments regarding potential future uses of the Site, Beazer has not agreed to conduct a cleanup to "unrestricted residential" standards, and EPA should clarify its recent communications by more explicitly stating that the foreseeable future use of the Site future does not include an unrestricted residential component. Beazer's legal comments are included below in the sections discussing the technical components of the Proposed Plan to which the legal comments pertain.

The details of Beazer's concerns with the Proposed Plan, along with alternative proposals where appropriate, are presented in the following sections.

## **1. Implementation of Source Treatment: ISS/S and ISBS**

The prescribed treatment of source areas in the Proposed Plan is flawed. The Proposed Plan calls for in-situ solidification/stabilization (ISS/S) in the Upper Hawthorn (approximately 25 feet to 65 feet below ground surface (bgs)) and in-situ biogeochemical stabilization (ISBS) in the Surficial Aquifer (approximately 0 to 25 feet bgs). This configuration for source treatment is impractical and has important and unnecessary implementation risks. Also, this configuration is not contemplated in any of the FS Alternatives, was not properly evaluated as an alternative source-treatment remedy, and should not have been listed as the preferred source-treatment design.

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<sup>1</sup> "Site" as used herein refers to the Koppers portion of the Superfund Site. "Superfund Site" is used to refer to the entire Cabot Carbon/Koppers Superfund Site.

As detailed below, the Proposed Plan's application of ISBS *above* ISS/S is impractical and it appears that EPA did not fully understand the implications or likely cost of such an application. Implementation risks associated with ISS/S in the Upper Hawthorn, and the availability of a more practical treatment technology, should lead EPA to reconsider the source treatment approach. Beazer proposes an alternative source treatment approach that is consistent with the overall remedial strategy and includes effectiveness demonstration for ISBS with an ISS/S implementation component as a contingency.

In considering the appropriate source treatment approach, it is important to recognize that in this instance (1) source treatment is applied primarily for the purpose of reducing potential dense non-aqueous phase liquid (DNAPL) mobility and (2) source treatment is applied within a robust containment system. The robust groundwater containment system described in the Proposed Plan effectuates protection of human health and the environment by eliminating migration pathways from the sources. The engineered containment system includes (1) a subsurface vertical barrier wall around the primary source areas to a depth of approximately 65 ft, (2) a low-permeability surface cover to limit water infiltration into the containment area, and (3) additional hydraulic containment specified for the UFA and for the Surficial Aquifer outside the containment area that provides an added measure of protection. In addition, the existing clay layers of the Hawthorn Group are significant hydraulic barriers, as evidenced by the 125-foot hydraulic head difference between the Upper Hawthorn and Upper Floridan Aquifer (UFA).

**a. Application of ISS/S in the Upper Hawthorn Has Serious Implementation Risks**

In order to implement ISS/S in the Upper Hawthorn in primary source areas, a large-diameter auger (LDA) would be used to make thousands of 6- to 10-ft diameter mixing holes approximately 65 ft deep. Each LDA borehole would be required to pass through the upper clay layer of the Hawthorn Group. This application has the potential to drag down any mobile DNAPL that is presently trapped in the Surficial Aquifer or within and on top of the upper clay layer of the Hawthorn Group. In addition, each LDA borehole could also cause vertical pathways or conduits for the downward migration of any mobile DNAPL, especially along the outer perimeter of the borehole.

While the upper clay of the Hawthorn Group is not a perfect impermeable barrier, it does provide some natural protection against DNAPL mobility in two important ways. First, this layer provides hydraulic resistance, as evidenced by the approximately 1- to 2-foot groundwater head difference measured between the Surficial Aquifer and the Upper Hawthorn in the primary source areas. Second, DNAPL collects on top of low-permeability materials and can become trapped within the pore spaces of fine-grained materials such as clays. The protective qualities of the upper clay would be significantly compromised, and likely eliminated, by application of LDA mixing into the Upper Hawthorn.

**b. ISBS Has Technical Advantages over ISS/S**

On-Site pilot testing has demonstrated that ISBS is an effective technology for treatment of Site-related constituents. ISBS treatment results in (1) immobilization of DNAPL, (2) prevention of dissolution into groundwater, and (3) some removal of contaminant mass via chemical oxidation. This innovative technology has been successfully deployed at other sites and has resulted in demonstrable reduction in the mobility of DNAPL and DNAPL constituents. In the FS, all alternatives that involve the application of ISBS as a treatment technology include a redundant barrier-wall containment system and hydraulic containment in the UFA. ISBS provides source-area treatment, but is not critical to the elimination of

groundwater-migration pathways. Rather, ISBS is a good fit in an overall containment/treatment remedial strategy and compliments the other selected technologies.

Other advantages of ISBS, as compared to ISS/S include:

- ISBS is more easily implemented and achieves greater volumetric coverage with fewer and smaller borings (2- to 4-inch diameter).
- With ISBS, there is a much lower risk of moving significant quantities of DNAPL downward during implementation.
- ISBS can be reapplied if necessary, or ISS/S can be applied later if ISBS is not effective.
- The ISBS reagent will follow preferential pathways, in effect “chasing” DNAPL to provide targeted treatment where the DNAPL resides.
- Unlike ISS/S, ISBS results in some removal of constituent mass through chemical oxidation.
- ISBS generates relatively little waste soil that must be treated and/or disposed of.
- ISBS can be applied in a targeted fashion (areas and depths where impacts are observed) resulting in less wasted effort in horizons that are not impacted (e.g. impacted horizons within the Upper Hawthorn).
- ISBS is more easily applied through former building foundations and subsurface obstructions (e.g. in Former Process Area) than is ISS/S, and will achieve better coverage in such areas.
- ISBS is much more cost effective than ISS/S (cost per cubic yard treated).
- ISBS is much less resource intensive than ISS/S in terms of energy use, carbon footprint, and water use (consistent with EPA’s Superfund Green Remediation Strategy).

Both ISBS and ISS/S are active (aggressive) technologies rather than passive technologies. Challenges with effectiveness demonstration (e.g., measurement of mass flux) are not substantially different between ISS/S and ISBS.

Sufficient testing has been performed with ISBS to show that it will likely be effective at the Site. Beazer proposes to further demonstrate ISBS effectiveness at the Site through a full-scale demonstration.

### **c. The EPA’s Selected Source-Treatment Remedy in the Proposed Plan Is Not Practical**

When creating the 65-foot deep LDA boreholes specified in the Proposed Plan, and effectuating the column mixing (homogenization with a reagent), it is not feasible to mix only the lower portion of the columns. It is also not practical or advantageous to use two different stabilizing reagents (which also act as auger lubricants) for every column. Beazer has discussed this with two experienced LDA contractors and is convinced that such a deployment is infeasible or at least highly impractical. Based on the discussions at a technical meeting in Tallahassee on September 23, 2010, EPA’s consulting contractor agrees.

Simply stated, it is not practical to apply ISBS (which is designed for injection, not LDA mixing) *above* ISS/S.

**d. The EPA Has Severely Underestimated the Costs of Its Proposed ISS/S-Based Remedy**

The driving cost in ISS/S source treatment is the LDA mixing cost which is roughly proportional to the volume of soil mixed. The volume of soil that would be mixed by LDA into the Upper Hawthorn (per the Proposed Plan) can be calculated as the total area of the primary source areas (approximately 5 acres) times the mixing depth (approximately 65 ft): the result is over half a million cubic yards.

Though details are not provided, it is obvious that the Proposed Plan dramatically underestimates the volume of soil that would be mixed and, therefore, dramatically underestimates the overall net-present-value (NPV) cost of the full remedy. Apparently, the cost estimate in the Proposed Plan did not consider the soil in the Surficial Aquifer (from 0 to 25 ft) as soil to be mixed but, rather, used only the thickness of the Upper Hawthorn (or a part of that thickness) in deriving the volume to be mixed. However, as described above, and as acknowledged by EPA's own consulting contractor, it is impossible to mix a deep interval of soil using LDA without also mixing the soil above it.

The July 15, 2010, Proposed Plan estimates that the on-Site remedy will cost \$43.7 million (NPV). Less than one month later, at a public meeting on August 5, 2010, EPA inexplicably presented a revised NPV cost estimate for the on-Site remedy that was nearly 50% greater: \$65 million for the same remedy. In neither case were details of these cost estimates provided. The FS presents an NPV cost estimate of \$75 million for Alternative OnR-5F, which – although not the same – is most similar to the Proposed Plan on-Site remedy. One of the appendices to the FS details this cost estimate. Based on subsequent conversations with potential contractors, Beazer contends that the Proposed Plan's on-Site remedy is likely to cost at least \$75 million (NPV).

It is also important to note that over 78% of the construction costs for the Proposed Plan on-Site remedy are for application of the ISS/S with LDA soil mixing (based on the estimate worksheet in the FS). In Beazer's view it is not sensible to spend over three-quarters of the direct capital cost on an imperfect source-treatment component that is deployed within a robust containment system. It is the containment system (barrier wall, low-permeability cover, natural Hawthorn Group clay layers, and hydraulic containment) that reduces potential risks to human and ecological receptors. While source treatment is important for any CERCLA cleanup, putting the vast majority of the remediation dollars toward ISS/S at this Site does not make sense, particularly when there would be no measurable reduction in risk as a result of the significant increased expenditure on ISS/S application relative to the simpler ISBS technology which also achieves DNAPL stabilization.

**e. Beazer Proposes an Effective ISBS Approach with ISS/S as a Contingency**

For the reasons identified above, the selected remedy in the ROD should specify ISBS source treatment after additional effectiveness demonstration. Beazer proposes to conduct a full-scale demonstration of ISBS in one of the source areas early in the remedial design period. If ISBS proves to be ineffective, ISS/S would be implemented at all source areas.

Logistically, it would make sense to apply ISBS in the Surficial Aquifer and Upper Hawthorn (like FS Alternative OnR-5E) at the Former Process Area as a full-scale demonstration of the technology. This could be done during the remedial design time period while other components of the remedy are designed. Because the Former Process Area has many underground obstructions (former foundations,

pipes, etc.), ISS/S – with its large diameter boreholes – would be very difficult to apply in this area. Also, DNAPL has been collected (in small amounts) from both the Surficial Aquifer and Upper Hawthorn in the Former Process Area, meaning that DNAPL mobility reduction could be observed and documented in a full-scale demonstration. Impacts are not observed in the UFA near the Former Process Area. ISBS treatment in the Former Process Area will likely result in decreased flow of DNAPL to DNAPL-collection wells and the formation of stable-mineral crusts on DNAPL globules. The results of an ISBS demonstration in the Former Process Area could be monitored over a period of many months to determine likelihood of long-term effectiveness and suitability of use in the other source areas.

For the Former North Lagoon and Former Drip Track, the source treatment should also be ISBS in the Surficial Aquifer and in the Upper Hawthorn (like FS Alternative OnR-5E). ISBS should be applied in the Surficial Aquifer only at the Former South Lagoon (like FS Alternative OnR-5C) because this area has less observed DNAPL impacts than the other three source areas and there are no nearby impacts in the UFA.

In sum, ISBS should be the primary source-treatment component and ISS/S should be a contingent action to be applied if ISBS proves to be ineffective.

## **2. EPA’s Selection of Off-Site Remedies Was Not Consistent with the NCP**

The selected remedies for off-Site sediments in Springstead Creek and Hogtown Creek (the “Creeks”) should not have been part of the Proposed Plan and should not be part of the forthcoming ROD amendment. The proposed remedies for the Creeks in the Proposed Plan are not based on any evaluation of alternatives, as required by CERCLA and the NCP. Moreover, most of the impacts in the Creeks are not solely or even primarily attributable to Beazer or to activities at or on the Koppers portion of the Superfund Site. In addition, the cleanup criteria that are identified in the Proposed Plan are inappropriate. Further discussion regarding each of these shortcomings is provided below.

### **a. Selection of the Off-Site Sediment Remedy Was Not Vetted Through the NCP’s RI/FS Process and Was Arbitrary and Capricious**

In its proposed selection of off-Site sediment remedies for the Creeks, EPA failed to comply with the requirements of the NCP that require EPA to first identify and evaluate alternatives before proposing one of those alternatives as the preferred remedy. Indeed, with respect to EPA’s proposed off-Site sediment remedies in the Creeks, EPA neglected identify or evaluate the selected remedies prior to issuance of the Proposed Plan.

For the first time in the Proposed Plan, EPA proposed remedies for off-site sediment remediation that were never evaluated in the FS (“Excavation and removal of impacted sediment in excess of the probable effects concentrations”) as well as remedies for which costs were never considered (“Accurate cost estimation of the removal component of OfR-2 and OfR-4 depends on . . . significant unknowns.”). These flaws are not overcome by the issuance of “clarification and additional information about off-Site soil activities” in the Follow-up Off-Site Soil Remedy Fact Sheet. That document still neglects to provide cost estimates for the proposed off-Site sediment remedy and still fails to provide detailed analyses of off-Site sediment alternatives, both of which are necessary for remedy selection, as required by the NCP. Neither the Feasibility Study nor the Proposed Plan can form a legitimate basis for a ROD amendment for

the proposed off-Site sediment remedy. Until these deficiencies are remedied through the RI/FS process, the forthcoming ROD Amendment should not include any off-Site sediment remedy.

CERCLA requires EPA to select remedial actions in accordance with the NCP and to provide for a cost-effective remedy. *See* 42 U.S.C. §§ 9604(a)(1), 9604(a)(4), 9621(a), and 9622(a). CERCLA § 113(j)(2) provides that courts shall uphold [EPA's] decision unless the objecting party can demonstrate, on the administrative record, that the decision was arbitrary and capricious." 42 U.S.C. §9613(j)(2).

Where EPA action is not consistent with the NCP, courts have held that such action is arbitrary and capricious. *United States v. Burlington Northern Railroad Co.*, 200 F.3d 679, 694 (10th Cir. 1999) (holding that EPA acted arbitrarily and capriciously when it fundamentally altered a remedy with respect to scope and cost without following the NCP's required procedures for proposed amendments regarding cost, and noting that the "failure resulted in excluding the public and Potentially Responsible Parties . . . from the decision-making process, in violation of the [NCP]."); *Washington State Department of Transportation v. Washington Natural Gas Co.*, 59 F.3d 793, 802 (9th Cir. 1995) (noting that the NCP guides federal and state response activities and that such parties must follow the "detailed process set forth in the NCP" to recover their costs.)

Here, the Proposed Plan improperly selected a remedy for off-site remediation of sediments that was entirely missing from the Feasibility Study: excavation and removal of impacted sediment in excess of the probable effects concentrations. This remedy selection is inconsistent with the NCP because EPA did not "evaluate alternatives to the extent necessary to select a remedy," which is the very purpose of the RI/FS process. 40 C.F.R. §300.430(a)(2). According to the NCP, such an evaluation includes project scoping, data collection, risk assessment, treatability studies, and analysis of alternatives. *Id.* EPA's selection of sediment excavation and replacement in Hogtown and Springstead Creeks failed to consider, implement or incorporate any of these NCP requirements. And EPA's selection process was equally deficient in its failure to adhere to the NCP's required levels of public involvement in the decision-making process. 40 C.F.R. §300.430(c).

EPA's own guidance undermines the approach followed here. In 2005, EPA issued guidance documents that explained the investigation issues unique to sediment environments and the importance of developing clearly defined remediation goals based on site-specific data. *Contaminated Sediment Remediation Guidance for Hazardous Waste Sites* (2005) (Sediment Remediation Guidance). In particular, an excavation alternative "should include an evaluation of all phases of the project, including removal, staging, dewatering, water treatment, sediment transport, and sediment treatment, reuse, or disposal." Sediment Remediation Guidance (p. iv). None of these project phases were detailed, analyzed or evaluated by EPA in connection with the Proposed Plan.

Chapter 7 of EPA's Sediment Remediation Guidance discusses the risk management decision-making process and the NCP's remedy selection framework. The Guidance states that "it may be appropriate to postpone a final decision if there is significant doubt about the proposed action's ability to reduce site risks substantially in light of the *potential magnitude of costs* associated with addressing certain sediment sites." Sediment Guidance 7-1 (emphasis added). Here, neither EPA, the public, nor Beazer properly can evaluate sediment remediation alternatives because no alternative has been presented for review and no costs have been estimated. A review of the administrative record indicates that EPA has not recognized the potential need for specialized equipment, the increased truck traffic for transport of dredged material,



the impact of dredging and replacement to workers and the community, or the disruption to local residents and businesses that would occur during excavation and replacement of sediments in the off-site Creeks.

EPA's Proposed Plan is deficient because the off-site remedy selections do not reflect that the NCP's nine criteria formed the basis for the remedy selection decisions. In the complete absence of any evaluation of sediment remediation in the FS or Proposed Plan, EPA's off-site remedy selection is not consistent with the NCP, is arbitrary and capricious, and cannot form the basis for a Record of Decision.

**b. Impacts in the Creeks Are Not Attributable Solely to Beazer or the Koppers Portion of the Superfund Site**

As evidenced by the work in the Creeks being performed by Cabot Corporation (Cabot) pursuant to, *inter alia*, Cabot's EPA-approved "TAR REMOVAL WORK PLAN" dated October 19, 2009, and "POLLUTION PREVENTION PLAN FOR TAR REMOVAL, SPRINGSTEAD & HOGTOWN CREEKS, GAINESVILLE, FLORIDA" dated July 2010, neither Beazer nor operations at the former Koppers portion of the Superfund Site are primarily responsible for the Creek conditions that may require remediation under the approach presented in the Proposed Plan. According to these two Cabot Plans, the Springstead and Hogtown Creek conditions are believed to have been created by historical discharges from the former Cabot Carbon property, including a massive release resulting from a historic breach of Cabot's former pine tar products lagoon.

In contrast to the above-referenced Cabot Plans, the Proposed Plan recommends off-Site sediment remedies in the Creeks but states that the Proposed Plan is only proffering these off-Site remedial options for impacts allegedly caused by the Koppers portion of the Superfund Site. There is no reasonable or rational basis for EPA to simultaneously approve Cabot Plans that acknowledge the Cabot portion of the Superfund Site is the source of Creek contamination, and then issue a Proposed Plan that suggests – without any supporting documentation – that an off-Site sediment remedy in the Creeks is connected or related to the Koppers portion of the Superfund Site.

Because most or all of any remediation-driving impacts identified in Springstead Creek and Hogtown Creek sediment resulted from releases at and from the former Cabot Carbon property, it seems inappropriate and arbitrary for EPA to direct Beazer to implement a remedy for off-Site sediments in the Creeks. And, it is even more confusing for EPA to use a ROD Amendment that purportedly pertains solely to the Koppers portion of the Superfund Site to implement this directive. Moreover, there is no indication in the Proposed Plan or any supporting documentation that EPA will use the forthcoming ROD Amendment to impose obligations upon Cabot requiring it – as a party primarily responsible for Creek contamination – to comply with, participate in, or even cooperate with Beazer, with respect to implementing the proposed off-Site Creek remedy.

While Beazer is not at this time refusing to participate on a limited basis in the investigation and potential remediation of the Creeks, it is arbitrary and capricious, as well as without any reasonable or rational basis, for EPA to use a ROD Amendment purportedly limited to the Koppers portion of the Superfund Site to mandate a remedy associated with releases and contamination that even EPA has acknowledged are sourced from the Cabot Carbon portion of the Superfund Site.

**c. The Cleanup Criteria for the Creeks Are Inappropriate****i. Available Data**

As noted above, the Creeks have not been part of the RI/FS process. The nature and extent of contamination in the Creeks has not yet been fully investigated. In January and February 2009, Alachua County Environmental Protection Department (ACEPD) collected samples from the Creeks at locations where there was evidence of tar and/or visually impacted areas, which were selected after regular probing found relatively isolated visibly affected areas. This method of sample selection led to a highly biased data set in that constituent concentration data are only available from visibly impacted areas and not from all areas of the Creeks. It is likely that if sediments without visible impacts had been sampled, substantially lower constituent concentrations than reported by ACEPD would have been found in the majority of Creek sediments. Thus, representative concentrations of all Creek sediments would be much lower than reported by the ACEPD and concentrations have not been established for the length of the Creeks, nor has there been an established pattern of tar or other constituents. In sum, EPA has not reviewed an unbiased and objective data set for the Creeks, such as would have been developed had the Creeks been part of a CERCLA and NCP compliant RI/FS process.

**ii. Sources of Contamination**

The samples that have been collected demonstrate higher total PAH concentrations upstream of the Koppers Site, indicating sources other than the Koppers property are contributing the PAH concentrations measured in Creek sediments. Fingerprinting of the tar-like material identified by ACEPD is needed to determine the historic sources of this material and the potentially responsible parties (PRPs) associated with these sources. Once the PRPs have been established, both human health and ecological risk assessments may need to be completed to determine whether the environmental conditions warrant remediation, and to what extent.

**iii. Exposure Assumptions**

The comparison of sediment concentrations to FDEP residential SCTLs, as suggested by Table 1, to determine areas to be remediated is not appropriate and represents an incorrect and unrealistic application of those SCTLs. The surface soil CTLs make numerous highly conservative assumptions about potential exposures to constituents in soils. Many, if not all, of those assumptions do not apply to sediments. For example, the frequency of exposure to soil in residential yards is not the same as the frequency of exposure to the sediment in the creeks surrounded by dense growth, which makes access difficult. More appropriate exposure assumptions are warranted to first determine if potential risk above regulatory levels of concern exists to people possibly recreating in the creeks. If potential risk above regulatory criteria does exist, these same appropriate exposure assumptions could be used to develop reasonable cleanup levels to determine the extent of remediation.

Moreover, the Proposed Plan should not include any SCTLs for off-Site sediments as no evaluation of potential human health risks associated with off-Site sediment has been conducted. Until a risk assessment is completed that evaluates potential risk associated with hypothetical exposures to Site-related constituents in sediments, no basis exists to determine whether such hypothetical exposures may result in potential risks that exceed Florida's administrative target risk limits. Indeed, if a human health

risk assessment were to be conducted, given the generally low concentrations of Site-related constituents reported by ACEPD in their notably biased sampling, it is very likely that any potential risks that may be associated with such constituents in sediments will not exceed Florida's target risk limits and, therefore, that no remediation of creek sediments will be required for protection of human health.

Although no formal human health risk assessment has been done, the Department of Health at the University of Florida indicated that risks are not expected given the remoteness of the creeks. Remediation may be needed to remove visible tar, but not because of the residual concentrations of wood-treating related constituents.

#### **iv. Ecological Risk**

The Proposed Plan (Page 11, column 2, paragraph 4 and Page 12, column 1, first paragraph) indicates that EPA will defer to conservative default ecological endpoints because the screening level risk assessment previously submitted by Beazer has not yet obtained acceptance by EPA and FDEP. Not having completed a review of the screening level risk assessment represents an inadequate basis to use "conservative default endpoints" as a basis to establish cleanup goals. EPA similarly needs to review the screening assessment and provide technical justification why the conclusions of the screening risk assessment are not valid. That screening risk assessment concludes that concentrations of wood treating-derived PAHs in Springstead and Hogtown Creek sediments do not pose an unacceptable risk and that no remediation is necessary.

As described in Beazer's screening assessment, whole sediment toxicity tests conducted at eight wood-treating sites demonstrate that the concentration of total PAH in sediments needs to exceed at least 250 mg/kg before substantial (i.e., statistically significant) mortality of either *Hyalella* or *Chironomus*, two commonly used sensitive laboratory test species, is observed. The maximum total PAH concentration detected in sediment samples collected by ACEPD was 146 mg/kg, which was collected from a location upstream of the former Koppers facility. The highest total PAH concentration reported by ACEPD downstream of the former Koppers facility was 82 mg/kg. At no other wood treating site where such concentrations have been tested has Beazer found significant toxicity. Therefore, significant ecological risk to the benthic community attributable to releases from the former Koppers property is not expected in either Springstead or Hogtown Creeks.

If after its review of the screening level risk assessment, EPA were to disagree with the conclusion of an absence of an ecological risk, the Proposed Plan's indication that remediation of creek sediments is needed based upon "conservative default endpoints" is inconsistent with typical EPA practice, particularly in light of the information available at this Site. In most cases after a screening ecological evaluation is completed, those results lead either to the conclusion that potential ecological risk is not present and that further study and evaluation is not warranted or that a potential risk may exist and that more study and evaluation is needed to determine whether any potential risks are acceptable or not. Almost never does the agency reach the conclusion that remediation is necessary based only on the results of a screening evaluation. Exceedance of screening benchmarks, the only "ecological evaluation" presented in the Proposed Plan, does not connote that a risk exceeding regulatory action levels is present in Springstead and Hogtown Creek sediments. Thus, if after completing its review of the ecological screening evaluation provided by Beazer, EPA still believes that wood treating-related constituents in Springstead and Hogtown Creeks may pose an unacceptable ecological risk, the next step in the

ecological risk assessment process would be to conduct a more refined evaluation of potential ecological risk. Such an evaluation may, but does not have to, entail the collection and toxicity testing of sediment from the creeks in which locations potentially affected by the Site will be compared to upstream reference locations. Given that the highest total PAH concentration was found upstream of the former Koppers facility, if the highest upstream locations also demonstrate the highest toxicity to test species, results of such site-specific toxicity testing would demonstrate the absence of a significant impact from the former Koppers facility and, thus, remediation would not be warranted. Regardless, until more refined, ecological evaluations are completed, no determination about the need to remediate creek sediments can be made. Consequently, any reference to remediation of Springstead and Hogtown Creek sediment needs to be removed from the Proposed Plan.

Additionally, cleanup goals discussed in the screening assessment have, in fact, undergone extensive review by EPA Region III. Region III accepted those data as the basis for a 100 ppm total PAH sediment cleanup goal that is protective of aquatic receptors. Therefore, the Proposed Plan is in error when it implies that the evaluation presented in the screening evaluation has not obtained acceptance by EPA. Those assumptions and clean up goals have been accepted by another EPA Region.

In summary, since submitting updated sediment toxicity information to Region IV, Beazer has received no information indicating why those findings are not applicable to PAHs that may have originated from the former Koppers property. All sediment samples downstream of the confluence with the drainage ditch from the Koppers facility which were collected by ACEPD during the past two years showed total PAH concentrations less than 100 ppm. Notably, those samples represent a biased data set, as the samples were collected from the most impacted areas ACEPD identified in the Creeks following extensive probing and observation programs. Therefore, no reason currently exists to believe wood treating-related PAH concentrations in the creeks exceed the 100 ppm cleanup goal already deemed acceptable by EPA in another Region. In sum, there was no need to include cleanup of Springstead or Hogtown Creek Sediments in the Proposed Plan downstream of the Koppers portion of the Superfund Site. And, if a cleanup of sediments is ever required in the Creeks, any such cleanup is not related to wood-treating constituents and therefore should not be included in the forthcoming ROD Amendment.

### **3. The EPA's Selected Cleanup Goals and Related Criteria Are Unclear and/or Inappropriate**

#### **a. Groundwater Cleanup Goals Apply at the Limit of Institutional Control**

The Proposed Plan is unclear on the location where groundwater cleanup goals would be applied and enforced. Per Florida regulations, the appropriate location for application of the groundwater goals should be at the limit of institutional control (e.g., the Beazer property boundary) or the edge of the present plume if the plume is within the property boundary. Remedial Action Objective (RAO) bullet #3 in the Proposed Plan (p. 12) states that cleanup goals apply "outside source areas." This RAO was not included in the FS and conflicts with Florida's policy regarding points of compliance.

#### **b. The Basis for Listing Constituents of Concern Is Unclear**

It is unclear how the list of constituents of concern (COCs) presented in Table 1 of the Proposed Plan was determined. Several of the groundwater COCs listed (1,1-biphenyl, 2-phenol, bis(2-ethylhexyl) phthalate,

and n-nitrosodiphenylamine) are not commonly analyzed for and are not part of the present list of analytes for groundwater monitoring. Also, while benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene are soil COCs, they are not generally considered to be a groundwater threat because of their low water solubility and are not part of the current Site groundwater monitoring plan.

**c. The Tables Listing Default GCTLs and SCTLs Are Inaccurate**

Several of the GCTLs listed in Table 1 are incorrect. Of particular note, the GCTL for acenaphthene is 20 µg/L, not 210 µg/L. Also GCTLs should be corrected and listed separately for 3-methylphenol (35 µg/L) and 4-methylphenol (3.5 µg/L).

The default Commercial/Industrial (C/I) SCTL for antimony is 370 mg/kg. The C/I SCTL for arsenic is 12 mg/kg. The C/I SCTL for acenaphthene is 20,000 mg/kg. The C/I SCTL for benzene is 1.7 mg/kg. The C/I SCTL for 3-methylphenol is 33,000 and the C/I SCTL for 4-methylphenol is 3,400 mg/kg. Additionally, fluorene is misspelled in the table.

**d. Development of Leachability-Based Cleanup Criteria**

The Proposed Plan should have included language stating that any vadose-zone soil with the potential to create groundwater impacts above cleanup targets should be managed by either:

- Removal of the soil and placement within the capped consolidation area, or
- Placement of a low-permeability cap over the soil.

However, if such actions are required for any area where any constituent concentration exceeds a Florida *default* leachability-based cleanup target, then nearly the entire Site would require vadose-zone soil removal or capping. This action would not be necessary or reasonable because we know from groundwater concentration data that groundwater impacts are limited in areal extent. For example, the measured concentrations of pentachlorophenol in vadose-zone soil exceed the default leachability target of 0.03 mg/kg at locations throughout the entire Site; but pentachlorophenol is not detected in groundwater samples north and west of the area that will be within the vertical barrier wall.

As stated in the FS (and implied by language in Table 1 of the Proposed Plan), the definition of what soil concentrations pose a potential leachability concern, therefore requiring removal or capping, should be finalized during the remedial design phase. The pertinent cleanup target for the Proposed Plan is the groundwater-concentration cleanup target.

Beazer does not take issue with the application of “Florida leachability criteria” as presented in the Proposed Plan. However, Beazer requests that EPA clarify that the application of Florida leachability criteria does not mean that *default* leachability-based SCTLs apply.

**e. The EPA Has Inappropriately Rejected the On-Site Risk Assessment in Favor of Strict Application of Florida’s Default Direct-Contact SCTLs as Cleanup Levels**

The on-Site human health risk assessment was developed with the goal of being used as an adaptive management tool to determine whether proposed on-Site remedial alternatives meet Florida’s statutory risk limit of  $1 \times 10^{-6}$  (one in one million) for cancer effects and a Hazard Index of 1.0 for non-cancer

effects. The May 26, 2010 Human Health Risk Assessment (HHRA) takes into account changes in land use and incorporates comments received on an earlier version. EPA has not provided Beazer additional technical comments beyond those already addressed by the current HHRA. To the best of Beazer's knowledge, both the probabilistic and deterministic evaluations of potential risk presented in the HHRA are consistent with EPA risk assessment guidance and, thus, represent evaluations of potential risk that, contrary to the assertion in the Proposed Plan (Page 11, column 2, paragraph 3), do provide an adequate basis to define the required cleanup goals. In fact, the probabilistic evaluation presented in the HHRA should be preferred for establishing cleanup goals because the probabilistic evaluation provides a more realistic estimate of potential risk. Use of more realistic, but still conservative and health protective clean up goals derived from the probabilistic evaluation, will assure that limited resources are spent wisely and that the community is not exposed to undue risk by unnecessary remediation.

Beazer continues to believe that the most comprehensive and practical evaluation of the protectiveness of various on-Site remedial alternatives is through the direct use of the probabilistic on-Site risk assessment. Nevertheless, Beazer also recognizes that USEPA often uses the deterministic, site-specific risk assessment to "back-calculate" clean-up goals (referred to as SCTLs in Florida) based upon the site-specific assumptions presented in such a risk assessment. On-Site Site-specific SCTLs have been developed for all receptors that exceeded FDEP risk limit of one in one million estimated lifetime cancer risk in the HHRA. Two sets of on-Site soil SCTLs were developed: one based on the deterministic risk assessment presented in the on-Site risk assessment; and, the other set based on the probabilistic risk assessment presented in the on-Site risk assessment.

Deterministic SCTLs were developed for the trespasser, outdoor worker, indoor worker, utility worker, construction worker, and the recreational user potentially exposed to constituents in on-Site soils using the same exposure assumptions presented in the May 26, 2010 HHRA. A deterministic SCTL was also developed for the trespasser potentially contacting ditch sediments. Deterministic SCTLs, calculated using standard, simple equations, are shown in Table 1.

Probabilistic SCTLs were developed for the outdoor worker and indoor worker using the same methodology presented for the development of off-Site SCTLs (submitted October 14, 2010), but with the exposure assumptions used in the May 26, 2010 HHRA for the outdoor and indoor worker. The probabilistic SCTLs are based on Florida's statutory allowable cancer risk limit of one in one million ( $1 \times 10^{-6}$ ). Only the hypothetical future outdoor worker SCTLs are presented in Table 2 because these were more stringent than those for hypothetical future indoor worker. Two sets of Site-specific SCTLs were developed for hypothetical future on-Site workers. One set of SCTLs is protective of hypothetical future on-Site workers who have typical (median) potential exposures to COPCs in soil. The other set of SCTLs is protective of hypothetical future on-Site workers who have high-end (95% upper percentile) potential exposures to COPCs in soil..

TABLE 1

## SUMMARY OF ON-SITE SITE-SPECIFIC SOIL AND SEDIMENT CLEANUP TARGET LEVELS - DETERMINISTIC RISK ASSESSMENT

FORMER KOPPERS, INC. WOOD-TREATING FACILITY

GAINESVILLE, FLORIDA

Receptor/Area	SCTLs (mg/kg)			
	Arsenic	BaP-TE	Pentachlorophenol	TCDD-TEQ
Hypothetical Current and Future On-Site Trespasser	170	25	880	0.0013
Hypothetical Current and Future On-Site Trespasser in Drainage Ditch	200	25	880	0.0013
Hypothetical Future On-Site Outdoor Worker	5.3	0.75	27	0.000038
Hypothetical Future On-Site Indoor Worker	8.1	1.5	53	0.000075
Hypothetical Future On-Site Utility Worker	100	11	410	0.00059
Hypothetical Future On-Site Construction Worker	230	31	1100	0.0018
Hypothetical Future On-Site Recreational User	44	5.4	200	0.00028

TABLE 2  
SUMMARY OF MEE ON-SITE SITE-SPECIFIC SOIL/SEDIMENT  
CLEANUP TARGET LEVELS  
FORMER KOPPERS, INC. WOOD-TREATING FACILITY  
GAINESVILLE, FLORIDA

MEE SCTLs (mg/kg)		
Hypothetical Future On-Site Outdoor Worker		
COPC	Typical (Median)	Upper Bound (95%ile)
Arsenic	120	23
BaP-TE	18	2.0
TCDD-TEQ	0.00069	0.00015

Note that even though the probabilistic SCTLs are referred to as being protective of median and upper percentile potential exposures, respectively, at Florida's statutory target cancer risk of one in one million, they are actually more protective than required by Florida statute. Both the residential SCTLs and the on-Site worker SCTLs are derived using an upper bound estimate of the cancer slope factor for dioxin as well as other conservative exposure assumptions more fully described in the off-Site SCTL document (October 14, 2010). Use of a single upper bound slope factor as well as the other conservative exposure assumptions, to develop Site-specific probabilistic SCTLs, instead of a distribution of cancer slope factors, means that potential risks are overestimated and the resulting SCTLs are lower (more protective) than necessary to meet Florida's statutory target risk limit.

**f. Use of Overly Conservative Clean Up Goals Such As SCTLs May Create Greater Risk Than They Are Intended to Prevent**

As discussed above, Florida's default SCTLs are inappropriate to use as cleanup goals at this site. They do not account for Site-specific factors that mitigate potential risks presented in the HHRA and the derivation of off-Site Site-specific residential SCTLs. Additionally, the deterministic risk assessment process used to derive the default SCTLs is exceptionally conservative. The end result is unrealistic estimates of potential risk that greatly overstate any actual risk that may be present. By using such default SCTLs as clean up goals without taking into consideration the ramifications of their conservative nature, far more extensive remediation may be undertaken than is necessary to protect public health to the level



required by Florida statute. While implementing more extensive remediation than required by law seems like it should provide additional benefit to public health, doing so may actually cause more risk than it eliminates because the process of remediation creates risk. As the risks being remediated get smaller and smaller (because more and more conservative cleanup goals are being used), the extent of remediation increases and the risks associated with that more extensive remediation can begin to outweigh the risks that are being reduced. Basing remediation on realistic but protective cleanup goals derived from using probabilistic risk assessments that use reasonable combinations of assumptions leads to protective remedies that minimize the potential for risks associated with remediation to be greater than the risks that the remedy is being implemented to mitigate.

**g. The EPA Has Selected an Off-Site Cleanup Goal Without Any Consideration Of Site-Specific Off-Site SCTLs**

An off-Site Site-specific SCTL for TCDD-TEQ has been developed using probabilistic risk assessment methods for properties that are assumed to have potential exposures associated with residential use. As with the on-Site SCTLs, the residential SCTLs are based on Florida's statutory allowable cancer risk limit of one in one million ( $1 \times 10^{-6}$ ). Two Site-specific residential SCTLs were developed. One SCTL is protective of hypothetical residents who have typical (median) potential exposures to TCDD-TEQ in soil. That SCTL is 95 ng/kg. The other SCTL is protective of hypothetical residents who have high-end (90% upper percentile) potential exposures to TCDD-TEQ in soil. Beazer submitted the derivation off-Site SCTLs to EPA on October 14, 2010.

The Proposed Plan, issued on July 15, 2010, conclusively states that the off-Site residential soil cleanup level for dioxins will be Florida's default residential SCTL of 7 parts per trillion (ppt) as 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalents (TCDD-TEQ). Florida law permits the calculation of site-specific SCTLs, and Beazer has calculated and proposed site-specific SCTLs in the off-Site SCTL report. EPA was fully aware of the schedule for off-Site soil sampling, and the results of that sampling were integral to determining whether Site-specific off-Site SCTLs would need to be derived. Beazer requests that the EPA reconsider its decision of the selected off-Site cleanup level following its review of the off-Site SCTL report. In addition, contemporaneously with these Comments, Beazer has submitted a formal request for waiver of application of the Florida SCTLs as ARARs.

The SCTL for dioxins and furans is not consistent with current and proposed Federal guidance that governs cleanup of soils containing dioxins and furans nationwide. The EPA's current Federal guidance lists 1,000 ppt as the Preliminary Remediation Goal (PRG) for dioxins and furans. This PRG was issued in 1998 in *Approach for Addressing Dioxin in Soil at CERCLA and RCRA Sites*, OSWER Directive 9200.4-26 (EPA 1998). The PRG was issued as "a starting point for setting cleanup levels" at sites with soils affected by dioxins and furans. On January 7, 2010, in accordance with its Dioxin Science Plan, EPA issued *Draft Recommended Interim Preliminary Remediation Goals for Dioxin in Soil at CERCLA and RCRA Sites* (EPA 2009). The Draft Interim PRG document proposed a new interim PRG of 72 ppt TCDD-TEQ for residential soils. This proposed PRG, which has been through review at the Office of Management and Budget and is expected to be issued as final Federal guidance this year, is ten times higher than the SCTL proposed by EPA for use at the Cabot Carbon/Koppers Superfund Site. EPA is, thus, being inconsistent in its management of dioxin and furan soil sites.

In addition to the SCTL being inconsistent with pending Federal guidance, the cancer slope factor used in FDEP's calculation of the generic statewide SCTL for dioxins and furans is based on an outdated and scientifically discredited TCDD cancer slope factor (CSF) derived from toxicity study in rats (Kociba et al., 1978). The cancer slope factor was cited from a 1997 Environmental Protection Agency (EPA) document entitled *Health Effects Assessment Summary Tables*. This 1997 document presented a cancer slope factor published earlier in 1985 by EPA in a document entitled *Health Assessment Document for Polychlorinated Dibenzo-p-Dioxins* (Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office, Cincinnati, Ohio. EPA 600/8-84-014F.) The 1985 cancer slope factor used by FDEP is outdated and scientifically discredited as noted in detail in Arcadis' April 2010 document entitled *Comments on: Draft Recommended Interim Preliminary Remediation Goals for Dioxin in Soil at CERCLA and RCRA Sites (OSWER 9200.3-56), December 30, 2009* (submitted on behalf of Beazer and others; previously provided).

The cancer slope factor was already outdated in 2005 when FDEP derived its SCTL for dioxins and furans, but it is even more outdated in 2010 when EPA proposed the use of the generic statewide SCTL as a residential cleanup level for the Cabot Carbon/Koppers Superfund Site. Specifically, FDEP's 2005 document lists the following sources of toxicity values in order of preference: (1) EPA's Integrated Risk Information System (IRIS); (2) EPA's Provisional Peer-Reviewed Toxicity Values (PPRTVs); and (3) EPA's Health Effects Assessment Summary Tables (HEAST). Finding no values in sources 1 or 2, FDEP relied on the cancer slope factor listed in EPA's 1997 HEAST document to derive the generic statewide SCTL.

This protocol for selection of toxicity values is not consistent with EPA's 2003 document entitled *Human Health Toxicity Values in Superfund Risk Assessments* (Office of Solid Waste and Emergency Response, Washington, DC. OSWER Directive 9285.7-53. December 5, 2003.) The EPA's current Superfund protocol for choosing toxicity values lists IRIS and PPTRV sources as Tier 1 and Tier 2 sources, respectively, but it lists Tier 3 sources as "additional EPA and non-EPA sources of toxicity information. Priority should be given to those sources of information that are the most current, the basis for which is transparent and publicly available, and which have been peer reviewed." While HEAST is one Tier 3 source, other "EPA and non-EPA" sources are also Tier 3 sources of toxicity values.

The CSF used by FDEP is not a scientifically sound cancer-based toxicity benchmark for TCDD for numerous reasons:

1. It was selected without following EPA's (2003) OSWER Directive for selecting toxicity values and did not consider its scientific basis or other CSFs published in the peer-reviewed scientific literature.
2. It is based on an outdated classification of rat liver lesions from the Kociba et al. (1978) cancer bioassay.
3. It does not take into account changes in EPA's methods for cross-species scaling.
4. Its derivation using a linear dose-response model is inconsistent with TCDD's mode of action.

The Off-Site HHRA and the comments on EPA's proposed interim PRG for dioxins and furans both provide detailed scientific reasons why the CSF used by FDEP is not a scientifically sound. By selecting

the default CSF from 1985, derived from incorrect tumor response data using a non-threshold linear model and an outdated species scaling methodology the FDEP and EPA have ignored the current state of the science regarding the carcinogenic dose-response of TCDD. These very same views were provided to the EPA by the National Academy of Sciences in 2006 and have been expounded for over two decades by the scientific community, yet FDEP and EPA continue to ignore the scientific evidence.

**h. The Proposed Plan Does Not Include Provision for Use of Background Concentrations in Lieu of SCTLs.**

Beyond the changes discussed above regarding the derivation of Site-specific clean up goals, the Proposed Plan should also be modified to allow for the use of background concentrations as cleanup goals. Florida's rules specifically allow for use of background concentrations. Depending upon the results of the continued off-Site sampling, it is possible that off-Site soils in the vicinity of the Site may be identified that are below background levels but exceed Site-specific (or generic default) SCTLs. Such soils would not need remediation. The discussion of clean up levels in the Proposed Plan should be modified to acknowledge that potential.

**4. EPA Must Clarify That The Foreseeable Future Use of the Site Does Not Include an "Unrestricted" Residential Component**

During the RI/FS process, the EPA appropriately evaluated the Site as commercial/industrial property, including projections of potential future use for recreational purposes. The May 2010 FS states that:

On-Site residential exposure scenarios are not applicable based on the expected commercial/industrial and/or recreational use of the property. Evaluation of potential risks associated with nonresidential use scenarios is consistent with federal guidance (EPA, 1995), in which EPA proposes to address potential risks consistent with current and plausible future land-use patterns.

FS at p. 1-37 (emphasis added). However, the Proposed Plan noted that, because the wood treating operations at the Site had terminated, both Beazer and EPA were evaluating alternative future uses of the property:

**Site Risk Assessment**

Risk assessments were conducted to determine the current and future effects of contaminants on human health and the environment. . . . A human-health risk assessment (HHRA) for on-Site soils and sediment was submitted in 2009 and updated in May 2010 to take into account a change in land use and to incorporate comments received on the earlier version. The estimates of potential risk presented in the August 2009 HHRA assume that the use of the Site is for wood treatment in the foreseeable future because wood-treatment operations have ceased, this assumption is no longer valid. The HHRA was updated to take into account a change in land use not previously contemplated under the 2009 submittal.

Proposed Plan at p. 11, (emphasis added).

Recently, EPA has issued clarifying “Fact Sheets” distributed at the public meeting conducted on October 6, 2010, in which EPA stated:

EPA has made its reasonably anticipated land use determination based on several factors including property owner Beazer East’s planned retention of Site ownership and its indicated future use of the Site as commercial, recreational or mixed use with a residential component.

September 2010 Proposed Remedy Fact Sheet at p. 9 (emphasis added). The language of the Proposed Plan in conjunction with the “residential component” language in the Fact Sheets has, apparently, caused confusion in the community with respect to the nature of the foreseeable future use of the Site, despite the fact that EPA also stated in the Fact Sheet that “EPA has determined that unrestricted residential use is not a likely or practical future land use for the Site.” *Id.*, underlined emphasis added. Beazer is also aware that members of the local community have communicated to EPA their strong desire for the site to be remediated to unrestricted residential standards.

Beazer is voluntarily and in good faith cooperating with the EPA and the Local Inter-Governmental Team (“LIT”), among others, with respect to planning for potential redevelopment of the Site, and will continue such cooperation. However, it should be stated clearly and definitively in the ROD Amendment that Beazer has not committed to bearing any financial or other consequences of including “unrestricted residential” components in such re-use. Beazer has agreed to conduct an industrial/commercial site-specific cleanup that, with appropriate institutional and/or engineering controls, *may* result in a *restricted* residential use sometime in the future, such as condominiums or apartments on the upper floors of an otherwise commercial facility. Remediation of all or portions of the Site to “unrestricted residential” cleanup standards would obviously have a significant impact on the work required, as well as the corresponding costs, none of which have been evaluated through the RI/FS process and none of which Beazer believes is appropriate.

In addition, the local governments cannot unilaterally require Beazer to actually use the Site for residential purposes, or to prepare the Site for future residential use. The Site has been exclusively and lawfully used for industrial purposes since 1916. According to the City’s Comprehensive Plan, the Comprehensive Plan category for the Property is “IND” (Industrial). This category is the most intensive land use category in Gainesville’s Comprehensive Plan. The Industrial land use category is assigned to areas appropriate for manufacturing, fabricating, distribution, extraction, wholesaling, warehousing, recycling and other ancillary uses. The Industrial category permits uses such as the wood treating facility previously operated on the Site. In addition, the City’s Zoning Map lists the zoning district for the Property as “I-2” (General Industrial). The permitted uses, by right, in the I-2 category include “lumber and wood product,” which allows uses such as the wood treating facility that previously operated on the Site. At present, there have been no effective legal measures taken by the City or any other individual or entity to change, alter or amend these zoning classifications.

Under these circumstances, attempts by any party to use the ROD Amendment process to reclassify the legal zoning for the Site property in the attempt to force Beazer into a future residential use could conceivably amount to a “taking” without just compensation in violation of the Fifth Amendment of the Constitution of the United States. Moreover, even if such reclassification was permitted to move forward,

Beazer cannot be forced to use the property for any newly permitted purposes. As the owner of real property, Beazer has a fundamental and legally-protected right to make whatever use of the property it deems appropriate within the confines of lawful zoning and land use restrictions, including no use at all. In the event that Beazer does not reach agreement with the local government and others on a mutually-acceptable future use plan, Beazer can lawfully elect to simply leave the Site idle with appropriate controls to prevent Site access (fencing, guards, etc.). Accordingly, the idle scenario is also a foreseeable future use of the Site.







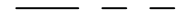
For all the reasons set forth above, the forthcoming ROD Amendment should specifically state that Beazer is conducting a commercial/industrial cleanup on the Site, and that “unrestricted residential” cleanup standards are inappropriate for the Site.

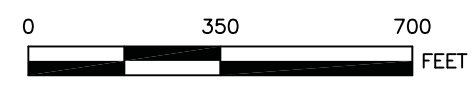
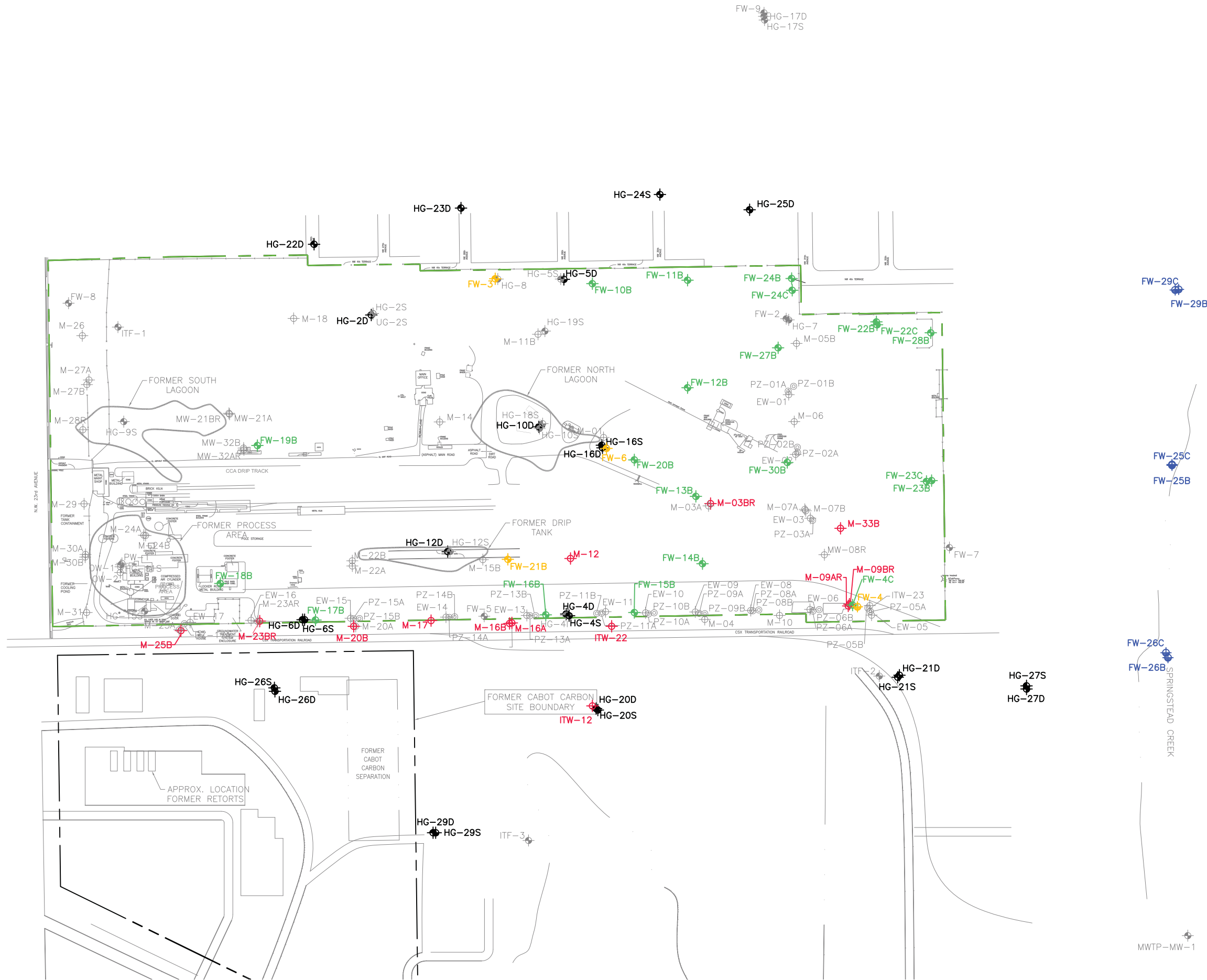
## **5. Off-Site Remedy for a Property will be Selected by Property Owner from a Short List of Potential Alternatives**


The Proposed Plan incorrectly describes the remedy selection process for off-Site properties. EPA will contact property owners needing to be included in remedial activities for their properties and describe the remedial alternatives available for that property. Property owners will, in consultation with EPA, select a remedial solution from those originally offered by EPA and Beazer. That short list of alternatives will comprise a subset of all possible alternatives that could be used to remediate residential surface soils.



### LEGEND

-  FW-21B FLORIDAN STANDARD CONSTRUCTION MONITORING WELL
-  FW-19B FLORIDAN WESTBAY MONITORING WELL
-  FW-25B FLORIDAN SENTINEL MONITORING WELL
-  HG-25D HAWTHORN MONITORING WELL
-  ITW-22 SURFICIAL MONITORING WELL
-  SUBJECT SITE PROPERTY LINE (APPROXIMATE)
-  FORMER CABOT CARBON SITE BOUNDARY



BEAZER EAST, INC. PITTSBURGH, PENNSYLVANIA		 FIELD & TECHNICAL SERVICES, LLC 200 THIRD AVENUE CARNEGIE, PA 15106
DRWN: KC	DATE: 08/18/10	
CHKD: RMB	DATE: 08/18/10	
APPD: AMG	DATE: 08/18/10	
SCALE: AS SHOWN	ISSUE DATE:	
2010 FIRST SEMIANNUAL COMPREHENSIVE GROUNDWATER MONITORING REPORT CABOT CARBON/KOPPERS SUPERFUND SITE GAINESVILLE, FLORIDA		
WELL LOCATION PLAN		PROJECT NO: OM045010 DRAWING NUMBER FIGURE 2

REFERENCE: GEOTRANS 2010 FIGURES COMPREHENSIVE GROUNDWATER MONITORING AND SAMPLING PLAN; AUGUST 4, 2010.

REV #	DATE	DESCRIPTION	APPD

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