



September 29, 2009

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: Additional Off-Site Soil Sampling
Cabot Carbon/Koppers Superfund Site
Gainesville, Florida**

Dear: Mr. Miller

On behalf of Beazer Inc. (Beazer), AMEC Earth and Environmental (AMEC) is providing this summary of off-Site soil sampling results and proposal for additional off-Site samples for the Cabot Carbon/Koppers Superfund Site (Site) in Gainesville, Florida. Samples were collected in February 2009 west of the Koppers Inc. (KI) facility boundary at five locations along the fence line and at 17 locations approximately 100 feet north and west of the KII facility. In June 2009 an additional 24 samples were collected at distances ranging from approximately 150 to 300 feet west of the KII facility. Results from the February and June 2009 sampling are presented on the attached figure. The following is a summary of results for each of the six streets where additional sampling was performed in June 2009. Where results for 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalents (TCDD-TEQ) are not below the Florida Department of Environmental Protection (FDEP) residential Soil Cleanup Target Level (SCTL) of 7 ng/kg¹, additional samples are proposed.

- **NW 32ND Ave.** In sample SS46, the concentration of TCDD-TEQ is 2.5 ng/kg, which is below the FDEP residential SCTL. This provides a TCDD-TEQ result below the FDEP residential SCTL at approximately 160 ft from the western property boundary of the KI facility. No further samples are proposed along NW 32ND Ave.
- **NW 31st Ave.** The TCDD-TEQ concentration in sample SS52 is 6.9 ng/kg, which is below the FDEP residential SCTL. This provides a TCDD-TEQ result below the FDEP residential SCTL at approximately 260 ft from the western property boundary of the Koppers Inc. facility. No further samples are proposed along NW 31st Ave.
- **NW 30th Ave.** The TCDD-TEQ concentration in sample SS57 is approximately 7 ng/kg. Based on the 1998 World Health Organization (WHO) Toxic Equivalence Factors (TEFs), which were used for the development of the SCTLs, the TCDD-TEQ concentration is 6.8 ng/kg. Based on the 2005 WHO TEFs, the TCDD-TEQ

concentration is 7.3 ng/kg. This result represents an approximately ten-fold decrease from the sample collected 100 ft to the east (SS55, 69.7 ng/kg) and provides a TCDD-TEQ result at or below the FDEP residential SCTL at approximately 300 ft from the western property boundary of the KII facility. No further samples are proposed along NW 30th Ave.

- **NW 29th Ave.** Although the TCDD-TEQ concentration decreases almost three-fold from 58 ng/kg in sample SS12 (approximately 70 ft west of KII) to 20.1 ng/kg in sample SS60 (approximately 260 ft west of KI), a result below the SCTL has not yet been achieved. Although sample SS61 (approximately 300 ft west of KI) has been collected and is on hold at the laboratory, we recommend collection of four additional samples further west on NW 29th Ave, at distances of approximately 350ft, 400 ft, 450 ft and 500 ft from the KI facility. The sample collected 350 ft from the facility will be analyzed first, and if the TCDD-TEQ concentration is above 7 ng/kg, the next sample to the west will be analyzed, and if it is less than 7 ng/kg, the next sample to the east (SS61) will be analyzed. Samples will be analyzed using this sequential approach until a result below the FDEP residential SCTL is achieved.
- **NW 28th Ave.** Although the TCDD-TEQ concentration decreases from 27.4 ng/kg in sample SS13 (approximately 130 ft west of KII) to 17.4 ng/kg in sample SS65 (approximately 300 ft west of KII), a result below the SCTL has not yet been achieved. We recommend collection of four additional samples further west on NW 28th Ave, at distances of approximately 350ft, 400 ft, 450 ft and 500 ft from the KI facility. The sample collected 400 ft from the facility will be analyzed first. If the TCDD-TEQ concentration is above 7 ng/kg, a sample further west will be analyzed and if it is less than 7 ng/kg, the sample to the east will be analyzed. Samples will be analyzed using this sequential approach until a result below the FDEP residential SCTL is achieved.
- **NW 26th Ave.** Although the TCDD-TEQ concentration decreases from 39.4 ng/kg in sample SS15 (approximately 110 ft west of KII) to 10.4 ng/kg in sample SS69 (approximately 325 ft west of KII), a result below the SCTL has not yet been achieved. We recommend collection of four additional samples further west on NW 26th Ave, at distances of approximately 350 ft, 400 ft, 450 ft and 500 ft from the KI facility. The sample collected 400 ft from the facility will be analyzed first, and if the TCDD-TEQ concentration is above 7 ng/kg, a sample further west will be analyzed. Samples will be analyzed using this sequential approach until a result below the FDEP residential SCTL is achieved.

The proposed sample locations will be marked in the field and U.S. EPA, FDEP, Alachua County and City of Gainesville will be invited to review the locations, as was done prior to the February and June 2009 sampling. Samples will be collected at all 12 proposed locations and submitted for laboratory analysis of dioxins/furans by U.S. EPA Method 1613B. Samples will be analyzed sequentially as described above and all sample collection and analyses will be performed in accordance with the Quality Assurance Project Plan (QAPP) approved by the U.S. EPA on January 6th, 2009. In accordance with F.A.C 62-780 and as

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described in the EPA-approved workplan, the soil samples will be collected from a depth of 0 to 6 inches below the ground surface.

Should you have any questions or concerns, please don't hesitate to contact Mitchell Brouman of Beazer (412-208-8805) or me at the number below.

Sincerely,



Paul D. Anderson, Ph.D.
Vice President,
Technical Director, Risk Assessment
AMEC

Enclosure

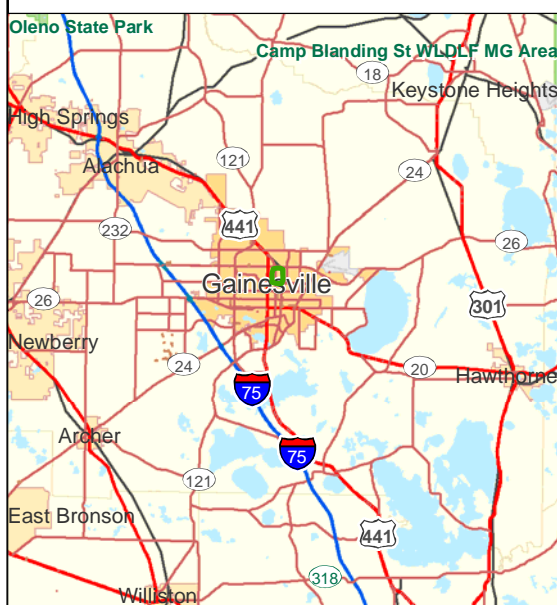
cc:

Mitchell Brouman, Beazer East, Inc.
Greg Council, GeoTrans, Inc.
Tim Wolfson, Babst Calland Clements & Zomnir, PC

ⁱ While Beazer is evaluating the off-Site results in comparison to the 7 ng/kg Florida SCTLs, Beazer does not believe that off-Site delineation to 7 ppt is required. Rather, Florida law permits the use of risk-based cleanup standards provided risks do not exceed 10E-6 for cancer risks and a HQ of 1 for non-cancer risks. In addition, other, more widely accepted delineation criteria may also be employed. For example, EPA has established a widely accepted and used health-based residential soil clean-up goal for TCDD-TEQ of 1 ug/kg. If the off-Site sampling program was using 1 ug/kg as a delineation objective, all off-Site properties sampled to date would have met the delineation objective indicating that additional sampling is not required and that unacceptable risks related to potential exposure to TCDD-TEQ in residential soils are not associated with the samples collected in residential neighborhoods to the north and west of the Site.



Location of Study Area



Existing Off-Site Soil Sample Results and Proposed Soil Sampling Locations

Cabot Carbon/Koppers Superfund Site
Gainesville, Florida

Beazer East, Inc.
Pittsburgh, Pennsylvania

Notes & Sources

Aerial Imagery source: <http://nikos.alachua.fl.us>, 2005.
Results in **BLUE** are above the residential direct exposure soil cleanup target levels of 2.1 mg/kg for ARSENIC, 0.1 mg/kg for BAPTE (benzo(a)pyrene toxic equivalents), and 0.000007 for TCDD TEQ (2,3,7,8-tetrachloro dibenzo(p)dioxin equivalents). All soil samples collected from 0-0.5 ft below ground surface.

Legend

Sample Location	
Analyte	Concentration of analyte in mg/kg

- U Non-detect J Estimated value
- Proposed Off-Site Soil Sampling Location (Collect and hold pending results of adjacent sample.)
- Proposed Off-Site Soil Sampling Location
- Existing Soil Sampling Location
- ▭ Parcel Boundary
- ▭ KI Boundary



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