



DATE: January 5, 2011
TO: Honorable Mayor *Low* and Members of the City Commission
VIA: Russ Blackburn, *RS* City Manager
FROM: Fred Murry, Assistant City Manager *FM*
SUBJECT: Offsite Soil Sampling Results and Notification to Residents

In September 2010, the Environmental Protection Agency (EPA) and Beazer East, Inc. (Beazer) collected surface and subsurface soil samples from properties to the West of the Cabot-Koppers Superfund in order to conduct testing for dioxins. This memo is to advise the Mayor and City Commission that Beazer recently mailed letters to the property owners providing the results of the sampling and analysis. Residents are being encouraged to contact Mitchell D. Brouman, P.G., Environmental Manager with Beazer East, Inc. at (877)678-9790 if they have any questions about the letter or sampling results. A copy of the notification letter has been attached for your review.

The Local Intergovernmental Team continues to review reports and analysis, and will provide updates on to the Commission as information becomes available. If you need any additional information, please do not hesitate to contact me at (352)334-5010.

Office of the Assistant City Manager
P.O. Box 490, Station 6
Gainesville, FL 32602-0490
(352) 334-5010 – (352) 334-3119-fax

Beazer

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

December 30, 2010

Dear Resident,

Earlier this year, you granted access to the Environmental Protection Agency (EPA) allowing EPA and Beazer East, Inc. (Beazer), to collect surface and subsurface soil samples from your property in order to conduct testing for dioxins. We thank you for your cooperation and are now providing you with the results of that sampling and analysis.

The enclosed figure shows the overall results of both the most recent round of testing conducted in September 2010, including the surface sample (or samples) collected from your property, as well as all earlier rounds of sampling. During previous rounds, samples were collected from public streets and rights-of-way. During the most recent round, more than 50 samples were collected from private properties. The enclosed figure shows the lot lines of all the properties to the west of the former Koppers wood treating plant, the street number of each lot, and the location of the samples collected from each lot (shown as black dots). The reported concentrations of dioxins are expressed in the manner typical of investigations of this type: as 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalents (TCDD-TEQ). The concentration detected at each sampling location is shown next to each black dot. You can identify the TCDD-TEQ concentration detected in the surface sample collected from your property by finding the lot with your street number on the enclosed map and then looking at the number next to the black dot. That number represents the concentration of TCDD-TEQ measured in that surface sample, presented as nanograms of TCDD-TEQ per kilogram of soil (ng/kg). The ng/kg measurement unit is equal to and the same as "parts per trillion" (ppt).

Several observations can be made about the dioxin data that have been collected to the west of the former Koppers plant.

- The concentration of TCDD-TEQ initially decreases rapidly with distance from the former Koppers plant but appears to increase in samples collected near Northwest 6th Avenue, possibly because of the presence of a source (or sources) in that area.
- The concentration of TCDD-TEQ in all soil samples collected beyond the fence line to the west of the former Koppers plant, including the sample (or samples) from your yard, are below EPA's current residential preliminary remediation goal (PRG) of 1000 parts per trillion, indicating that, according to EPA's existing guidelines, an unacceptable health risk does not exist.
- In December 2009, EPA proposed to establish a new interim PRG of 72 ppt for TCDD-TEQ that would temporarily replace the 1,000 ppt value while EPA continued to evaluate the potential risks posed by dioxins. Though EPA has not formally adopted this new proposed PRG, all concentrations to the west of the former Koppers plant, including the sample (or samples) from your yard, are below this new lower proposed PRG. This indicates that, according to EPA's newly proposed interim guidelines, unacceptable health risks due to TCDD-TEQ do not exist in your yard or your neighborhood.
- The concentrations of TCDD-TEQ in all soil samples collected beyond the fence line to the west of the former Koppers plant, including the sample (or samples) from your yard, are below the

site-specific residential Soil Cleanup Target Level (SCTL) of 95 ppt that has been proposed by Beazer. This value is calculated to meet Florida's allowable risk level of one-in-one-million, and takes into account Site-specific information and uses appropriate assumptions regarding factors such as exposure duration in your neighborhood.

These results provide strong indication that TCDD-TEQ concentrations detected in soils west the former Koppers plant do not pose an unacceptable risk to residents. The conclusion of an absence of unacceptable risk is reinforced by a June 17, 2010 Health Consultation completed by the Florida Department of Health (FDOH) following review of samples collected in 2009. In the Health Consultation, FDOH concluded that:

Based on June and December 2009 tests, incidental ingestion (swallowing) very small amounts of dioxin-contaminated surface soil along Stephen Foster roadsides is not expected to harm children or adults. Adults accidentally swallowing very small amounts of this soil over a lifetime are at a "very low" increased theoretical risk of cancer.ⁱ

The Health Consultation goes on to recommend that additional characterization of soils be undertaken. The more than 50 surface soil samples that were collected in September 2010, including the sample (or samples) collected from your yard, were conducted in consideration of the FDOH recommendation. The TCDD-TEQ concentrations measured in this latest round of testing (ranging from 3.4 ppt to 60 ppt, with the average concentration being 13.9 ppt) are lower than the concentrations found in the earlier sampling rounds (which ranged from 0.7 ppt to 69.7 ppt, with an average concentration of 17.1 ppt) which FDOH concluded were "not expected to harm children or adults."

This low likelihood of adverse health impacts at such low concentrations of dioxins has also recently been noted by the federal Agency for Toxic Substances and Disease Registry (ATSDR), a division of the Centers for Disease Control (CDC). In a November 17, 2010 letter to the Alachua County Board of County Commissioners the ATSDR states:

Adverse outcomes associated with dioxin exposures have not been reported in populations exposed to dioxin at the levels seen to date in the community surrounding Cabot-Kopper's property. The health problems of the people living in this community are likely to reflect common health problems seen in any similar group of individuals who do not live adjacent to the Cabot-Koppers site.ⁱⁱ

Beazer will be providing the most recent sampling data to the ATSDR for its review and consideration.

The concentration of TCDD-TEQ in about one quarter of all the soil samples collected to date to the west of the former Koppers plant are at or below the default Florida Department of Protection (FDEP) residential SCTL of 7 ppt. The EPA has been using the default SCTL of 7 ppt as a value to determine the point at which to stop collecting samples. However, for the reasons described above, Beazer believes that the reported exceedances of this very conservative default value do not indicate that any potential health risks exist that require remediation. The 7 ppt value is designed to be used in the absence of a site-specific SCTL, and is based on a number of overlapping, conservative assumptions that are purposefully intended to over-estimate any actual likelihood of an exposed individual experiencing an adverse health effect. In other words, a measured concentration exceeding the FDEP default SCTL does not establish that a potentially unacceptable risk exists. Beazer believes that its proposed Site-specific SCTL of 95 ppt protects area residents to the one-in-one-million risk level mandated by Florida's statutes, with a protective margin for error.

As you may recall, surface (0-6 inches deep) and subsurface samples (6-24 inches deep) were collected from all properties, including yours. As reported on the enclosed figure, the surface sample from each

property was analyzed for the presence of dioxins. The subsurface samples for five properties close to the former Koppers plant were also analyzed, with the remainder of the subsurface samples reserved, on the expectation that the subsurface samples would have even lower concentrations of dioxins than the surface samples. It was also anticipated that the highest concentrations potentially related to the former Koppers plant would be found in the samples collected closest to the former Koppers plant. Accordingly, if all the samples collected near the former Koppers plant were below the 7ppt delineation criterion, then analysis of the reserved subsurface samples collected further away from the former Koppers plant would not be conducted. As expected, the TCCD-TEQ concentrations in all subsurface soil samples analyzed from west of the former Koppers plant were less than the default residential SCTL of 7 ppt. These results indicate that TCDD-TEQ concentrations in subsurface soil to the west of the former Koppers plant are expected to be less than all the health-based goals and levels discussed above and, therefore, do not pose a potentially unacceptable risk. In addition, because the 7ppt delineation criterion was met in the samples closest to the former Koppers plant, additional sampling and analysis of the deeper subsurface soil more distant from the former Koppers plant is not anticipated.

If you have any questions about this letter or the data presented in the enclosed figure, please contact Mitchell Brouman at Beazer (1-877-678-9790).

Sincerely,

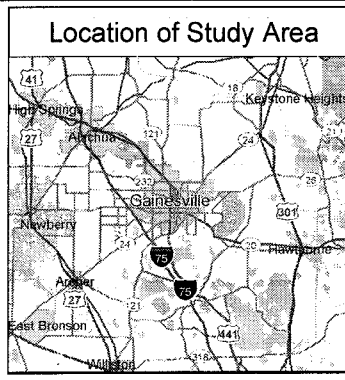
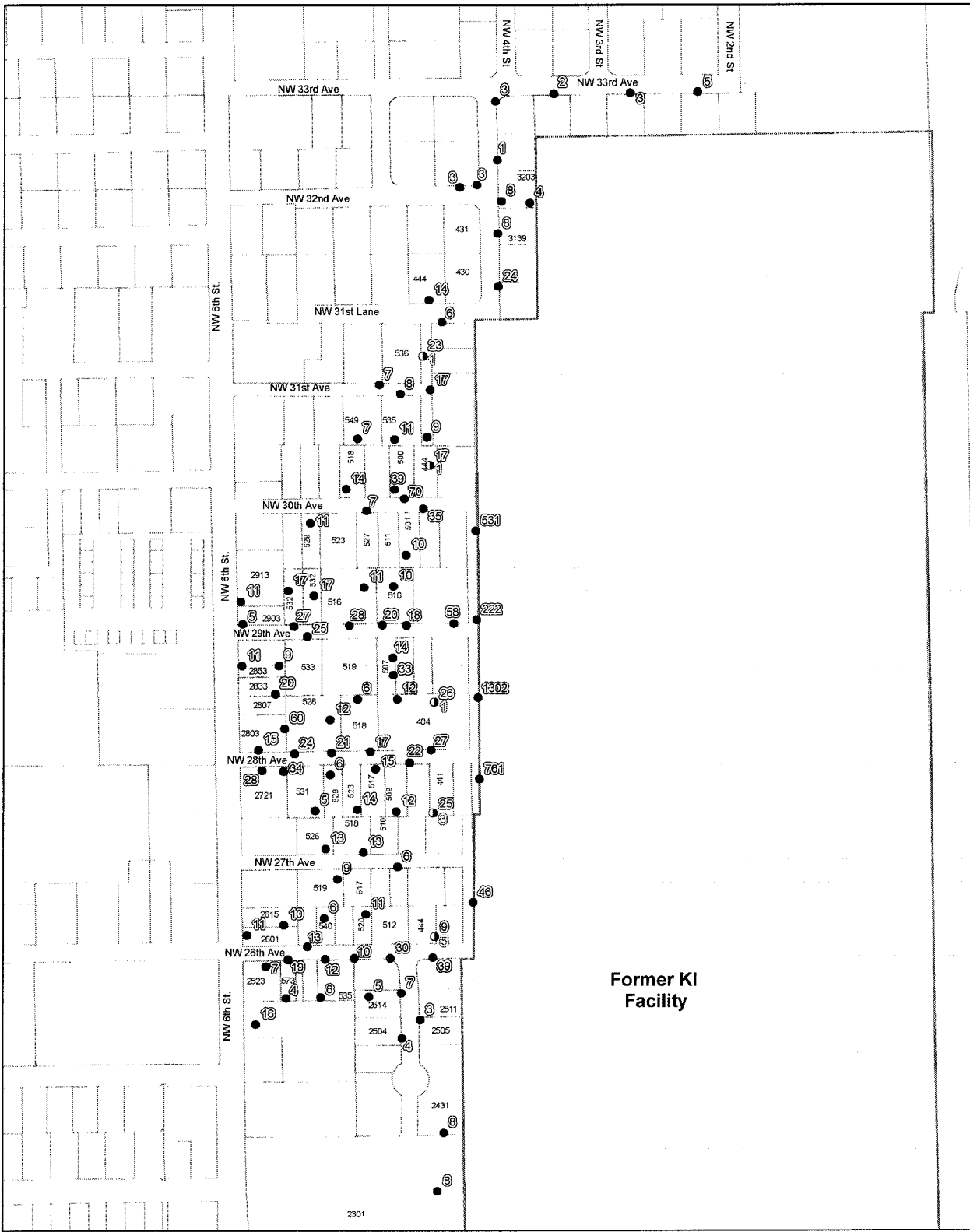
A handwritten signature in black ink, appearing to read "Mitchell D. Brouman", with a long horizontal flourish extending to the right.

Mitchell D. Brouman

Cc: Scott Miller, USEPA Project Manager

ⁱ Florida Department of Health. Health Consultation. Additional Off-Site Surface Soil, Koppers Hazardous Waste Site, Gainesville, Alachua, Florida. EPA Facility ID: FLD980709356. June 17, 2010.

ⁱⁱ Letter from Dr. Thomas R. Frieden, Director, Centers for Disease Control and Prevention, and Administrator, ATSDR to Ms. Cynthia Moore Chestnut, Chair Alachua County Board of County Commissioners, dated November 17, 2010.



TCDD-TEQ Results Off-Site Samples to the West

Cabot Carbon/Koppers
Gainesville, Florida

Beazer East, Inc.
Pittsburgh, Pennsylvania

Notes & Sources

Parcel Data: Alachua County, FL
 Sample results for 2,3,7,8 tetrachlorodibenzo(p)dioxin toxic equivalents (TCDD-TEQ) estimated using the 2005 World Health Organization toxic equivalency factors

- ### Legend
- 49 Location of surface soil sample (collected from 0 to 6 inches below ground surface) and measured TCDD-TEQ concentration (ng/kg)
 - 10 Location of surface soil sample (collected from 0 to 6 inches below ground surface) and subsurface soil sample (collected from 6 to 24 inches below ground surface) and measured TCDD-TEQ concentration (ng/kg)
 - Lot lines of properties to the west of the Site from which samples were collected
 - 530 Sheet Number of properties to the west of the Site from which samples were collected
 - ▭ Boundary of Former Koppers Facility

