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Subject: ACEPD Comments on Arcadis Beazer Soil Data Summary And Fingerprinting Report Nov 2013 and ACEPD

Recommended Additional Sampling Locations

Date: Monday, January 06, 2014 12:13:00 PM

Scott and Rusty,

The Alachua County Environmental Protection Department (ACEPD) has the following comments on the above referenced Arcadis Beazer Soil Data Summary and Fingerprinting Report dated November 2013 and recommended additional surface soil sampling locations which we believe are needed to complete the offsite soil delineation. These comments also incorporate input from the City of Gainesville (Stu Pearson).

Recommended Additional Offsite Sampling Locations

- 1) There are certain properties south of the former Koppers site adjacent to NW 23 Ave and NW 2nd St and NW 3rd Terrace currently used for residential apartments or school use that are adjacent to road rights-of-way that have concentrations of dioxins, arsenic and PAHs above FDEP Default residential criteria. ACEPD recommends that sampling and analysis of soils on these properties (identified by Beazer/ Tetra Tech as parcels J01, K01 and K10) be performed for arsenic, PAHs and dioxins.
- 2) The residential properties along NW 20th Ave south of the former Koppers site (Lots J09, J07 and J05) that are adjacent to sampling locations 388, 389 and 363 should be sampled to confirm if the property concentrations are above FDEP Residential SCTL of 7 ppt. The adjacent right of way samples indicate Dioxins TEQ ranging from 8 to 10ppt.
- 3) An additional surface soil sample is recommended from the residential property on the south side of NW 33rd Ave. immediately adjacent to the City MSY yard. The street address is 201 NW 33rd Ave. There are several sampling locations in the City MSY property immediately east of this residential property which have elevated dioxin TEQ concentrations of which the lowest value is 40 ppt. The west side of this property there are concentrations of 5ppt and 7 ppt. There is no data on this property to guide a decision on whether or not this property may need remediation.
- 4) There are no dioxin concentration measurements either on or near the commercial properties south of the former Koppers Site (identified by Beazer/TetraTech as parcels LO1 and LO2) in the area south of NW 23 Ave, east of NW 2nd Street and extending east toward the former rail corridor. The concentration of Dioxin TEQ on the edge of former Koppers site immediately north of this area along NW 23rd Ave shows values ranging from 30ppt to 40ppt which is at or slightly above the FDEP Commercial/Industrial SCTL. Due to the historical truck traffic from the former Koppers site from the entrance on NW23rd Ave and the potential dust generation from the site and vehicles, ACEPD believes it is important to

complete the delineation for dioxins to include this commercial and mixed use parcels.

5) The dioxin TEQ data to the east and north of the former Koppers site on or north of the former Cabot site indicate that for soil samples taken adjacent to the road rights of way the dixoin TEQ is below or at FDEP commercial/industrial SCTLs. The surface soil dioxin TEQ concentrations at the eastern boundary of the former Koppers site are significantly above the FDEP default commercial/industrial SCTL. There is no data on the concentration of dioxin in the surface soils on the commercial properties adjacent to site on the east that are bounded by the right of way samples. In addition no data exists on the railroad corridor which has been documented to have received extensive stormwater runoff from the former Koppers site in the recent past. A similar situation applies to contamination with arsenic and the PAHs which show levels above the FDEP commercial/industrial SCTL in some of the rights of way samples to the east of the site. ACEPD believes it is necessary to complete the assessment of dioxin and arsenic and PAH in surface soils in the railroad corridor and the adjoining commercial properties to the east of the former Koppers site in order to determine what if any health risks exist and to see if land use restrictions or remediation need to be implemented on these properties.

General Comments on Report

- 6) In instances in the Executive Summary when discussing the measured off-site residential area soil concentrations of arsenic, PAHs and dioxins/furans, the report make comparisons to soil concentrations in "background" areas. The term "background" area as used in these comparisons (example page E-2) is somewhat confusing and appears to refer to a combination of residential and residential busy street background concentrations from areas away from influence of the Site. It is not clear if Arcadis meant to use this combination for background comparison purposes but ACEPD believes it is not appropriate to compare offsite residential soil concentrations to residential busy street background concentrations because with the possible exception of the parcels along 6th street, the majority of residential areas offsite the Koppers parcel are not on located busy streets. Residential areas soil concentrations should only be compared to residential area "background" data only which in Table 2-4 is labeled as BGR data.
- 7) In several instances in the report when discussing the risks posed by the measured concentrations of arsenic, PAHs and dioxins/ furans in offsite soils, the phrase "do not pose an unacceptable risk" to residents is used. We do not believe that the use of this phrase is appropriate. While the overall human health risks as determined by the Florida Department of Health are very low for the maximum concentrations of soil contaminants measured in offsite samples not in the boundary area, the measured concentrations in several of the samples from residential properties offsite still exceed the State of Florida default residential SCTL for unrestricted residential use and by definition exceed the FDEP's acceptable risk level of this unrestricted use. We would recommend that the wording for describing the risk be changed to low or very low and not use the "no unacceptable risk" phrase.

8) In the fingerprinting evaluation of the PAHs and the dioxin/furan, statements are made in the report that results of the fingerprinting analysis provide evidence that other sources of (PAHs or dioxins) exist or have existed near the Site and are influencing the composition of (PAHs or dioxins) found in certain offsite samples. While these comparisons may suggest that other sources may be contributing to the measured concentrations in some locations, it is not possible to completely rule out, especially for offsite samples adjacent or relatively near the former Koppers Site, that the Site itself may also be contributing to the observed concentrations above FDEP default residential and commercial/industrial criteria. Additionally, the report states that where the fingerprinting evaluation indicates a close match of offsite samples fingerprint or ratios to onsite fingerprint or ratios that this is not necessarily indicative of the Site being the source of the contamination. It seems that based on the reasoning used to declare that different fingerprint patterns may indicate a source other than the Site for the observed contamination, that an offsite fingerprint or ratio matching onsite data points should also provide a similar level of confidence that the Site is a potential contributing source to this observed offsite contamination.

Let me know if there are any questions and I look forward to the phone call on January 8, 2014 to discuss these issues and sampling recommendations.

John

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