

January 4, 2012

Alachua County Environmental Protection Department (ACEPD) and City of Gainesville Comments on November 30, 2011 Gradient Draft Vapor Intrusion Assessment Workplan

- 1) Public Outreach – We recommend that a preliminary public information and public outreach plan be implemented by Cabot and USEPA for communicating the purpose and intent of the VI study to the businesses to be sampled. Information about whether there is any immediate acute hazard concern should also be communicated. It is possible that these businesses are not aware of the recommendation from the 5 year review to perform this VI study. Information should follow guidance documents for the activity. This should help by reducing the time needed to gain access to the sampling locations.
- 2) We agree with the USEPA comments concerning the requirement to include an 8 hour sampling event in addition to the 1-hour sampling event at each site and requiring that all components in the TO-15 method be reported with the analytical data.
- 3) Section 3.1 Rationale for Selecting Buildings-- Sampling within the former K-mart store should be conducted at the same time as the proposed sampling in the Winn Dixie and Big Lots store and not be a contingent sampling effort. The former K-mart location is located over the former retort area same as the Big Lot store and would have the same potential for VI. Also this store area is a large foot print of the original building.
- 4) Section 3.3.1 Sample Point Installation - Criteria should be included that specify the minimum offset from an exterior wall for location of sampling points to insure that representative sub slab vapors are collected and not be diluted with outdoor air.
- 5) Section 3.3.1- Sample Point installation -- The sentence "Prior to drilling..." should be moved to the second bullet position in the list.
- 6) Section 3.3.2 – Sub-slab Vapor Sample Collection -- An appropriate minimum time should be specified for the sub-slab vapor plume to stabilize after the integrity testing of the sampling port. Prior to the sampling port installation the vapor plume pressure under the slab is in equilibrium with the generating source and the leakage around and through the slab. Once the penetration occurs and the port is installed, the prior equilibrium is lost and the pressure changes until the seal is restored. Once the seal is restored the plume pressure begins to return to its previous value. It is important that that the sampling be delayed until the plume pressure has returned to its previous or near previous value to assure the acquisition of reliable data.
- 7) Section 3.3.5 - Integrity testing - Integrity testing of the seal should be conducted at all sampling points and not just one point prior to measuring the differential pressure across the floor slab as described in 3.3.1. To better assure the accuracy of the measurement, it is important to establish that there is no leakage at each sampling point and not just rely on one test at one sampling location, due the unique physical sealing of each hole in the slab. This integrity sampling should be conducted prior to sample collection.
- 8) Section 3.3.6 - Differential Pressure – We recommend that the sampling should be conducted during a period when a stable barometric pressure system is present at the site. Hurricanes and other wind events would bias the results of the sub-slab sampling and the differential pressure study.
- 9) Section 3.4 Data Validation Review-- Data validation should include some level of review of the initial calibrations and instrument tunes as well review of some of the raw data for samples and quality controls. This is good practice to check on the integrity of the laboratory data.