

#### **Board of County Commissioners**

# ALACHUA COUNTY ENVIRONMENTAL PROTECTION DEPARTMENT

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Ms. Amy Williams
Remedial Project Manager
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EPA Region 4
61 Forsyth St., S.W.
Atlanta, GA 30303 – 8960

Re: ACEPD Comments on Beazer East, Inc Proposed Interim Measures/Remedy Pilot Approach Cabot -Koppers Superfund Site—Dated August 4, 2004 ACEPD Comments on GeoTrans, Inc. Groundwater Flow and Transport Modeling Cabot-Koppers Superfund Site—Dated April 22, 2004

Dear Ms. Williams:

The Alachua County Environmental Protection Department (ACEPD) is enclosing as Attachment 1 with this letter specific comments and recommendations concerning the above referenced reports for the proposed interim/ pilot studies and groundwater modeling studies at the Cabot-Koppers Superfund Site as well as recommended site data acquisition requirements. These comments include recommendations for further investigation of the Floridan and intermediate aquifers (Hawthorn Group) and expansion of the proposed pilot remedy approaches that are needed for developing an appropriate final remedy for the site considering the deeper presence of free product and the significant impacts to the deeper aquifers at the site that has been revealed by the recent site investigations.

The confirmed increased contamination impacts to the Floridan and intermediate aquifers at the site and the increased potential impact of this contamination to our community's water supply sources has significantly raised the urgency and need for immediate remedial actions at this site. In March 2004, Alachua County specifically requested that USEPA take immediate interim remedial actions to remove source material from the surficial aquifer and begin the process of curtailing discharges to the Floridan and Intermediate aquifers. While ACEPD acknowledges the recent actions taken by USEPA to expedite field investigations by Beazer East (Beazer) and to expedite Beazer's progress toward developing a revised feasability study for the site, ACEPD remains concerned that USEPA and Beazer have not initiated nor appear to be seriously considering expedited actions to remove source material from the site. The recent "interim actions" proposed by Beazer are inadequate and do not address the specific request made by the County to USEPA in terms of initiating source removal actions. ACEPD requests that immediate actions to remove source



material from the site be taken simultaneously with continuing progress toward developing a site wide feasablity study and remedial plan. The need for immediate action by USEPA and Beazer is made more urgent when one considers the recent new data from the site investigations. Field activities conducted at the Koppers site in April through June 2004 have proven that creosote related source material has migrated into the Hawthorn Group formations at depths of greater than 100 feet below the surface. The presence of this source material in seven of 10 wells installed on the site indicates that the Hawthorn Group contamination is widespread and mobile. Napthalene has been detected in the Floridan aguifer near the source areas at confirmed concentrations of 1,240 parts per billion which is 62 times the Florida Groundwater Clean-up standard and 12.4 times the site groundwater clean-up goals established in previous draft Record of Decision for this site. Benzene has also been detected in the Floridan aquifer at 5 to 8 times Florida groundwater clean-up standards. Evidence of possible offsite migration in the Hawthorne Group has also been observed from nearby offsite well data. ACEPD is concerned about the continuing impacts to the Floridan and intermediate aquifers that will continue unabated during the several year period that may be needed to complete feasibility studies, develop designs and implement the final remedy for this site. Considering the disappointing and lengthy 20 year history of studies and delays at this site, it seems that time is long overdue for implementing immediate measures to remediate the source areas at this site.

ACEPD understands that Beazer intends to evaluate all recently obtained site data as well as the results of the proposed pilot remedial studies in developing the draft Feasability Study report which is proposed by Beazer for completion in December 2004. ACEPD believes that it is critical and would expedite the review of the draft Feasability Study if all assumptions and conclusions made by Beazer from the recent completed and proposed field studies that will be used by them to develop the draft Feasibility Study be made available to EPA, ACEPD, Gainesville Regional Utilities (GRU), Florida Department of Environmental Protection (FDEP) and all other stakeholders for their review and comments prior to completing the draft Feasibility Study. For instance, assumptions or conclusions about the mobility of the source material or the technical viability or limitations of excavation or other treatment techniques should be clearly communicated and agreed to by EPA and other stakeholders.

If you have any questions or comments about these concerns please contact me at 352-264-6801.

Chris Rird

Sincerely

**Environmental Protection Director** 

CC: Mike Slenska, Beazer East, Inc. Kelsy Helton, FDEP Robin Hallbourg John Mousa Brett Goodman, GRU Paul Myers, ACHD File Copy (1658 Green)

CB/jjm

**Attachment 1**: ACEPD Comments on Proposed Interim Measures/Remedy Pilot Approach Cabot - Koppers Superfund Site—Dated August 4, 2004 ACEPD Comments on GeoTrans, Inc. Groundwater Flow and Transport Modeling Cabot-Koppers Superfund Site—Dated April 22, 2004

#### Attachment 1

### ACEPD Comments on Proposed Interim Measures/Remedy Pilot Approach Koppers Portion of the Cabot Carbon/Koppers Superfund Site Dated August 4, 2004

- 1. The initial sampling of Floridan well FW-06 indicated that the naphthalene concentration was 2,560 ug/L. Elevated levels of other compounds (e.g. methylphenols, polynuclear aromatics, benzene and other volatile organics) were also measured in samples from this well. The results of resampling this well (FW-06) following redevelopment (removing approximately 1,300 gallons), reported that the naphthalene concentration was 1,240 ug/L and the other organics were somewhat lower in concentration. Based on the elevated concentrations of site contaminants in the Floridan aguifer, ACEPD is requesting that this well be further developed and again resampled.
- 2. Since it is unclear whether the contaminants detected in well FW-06 entered the Floridan aquifer due to vertical migration or through well construction activities, ACEPD requests that a second Floridan well be installed downgradient of FW-06. ACEPD recommends this well be installed, developed and sampled immediately to further define the contamination in the Floridan aquifer. This would aid in determining if the contaminants found in FW-06 were "carry down" from drilling activities or are moving northerly in the groundwater. Timely installation and sampling of this additional well is paramount to protection of the Floridan aguifer at the site.
- 3. The contamination of the Geiersbach irrigation well is evidence that there is a westerly component of contaminated groundwater flow at the site. To delineate the magnitude of this westerly contaminant movement, ACEPD strongly recommends installation of the Beazer proposed Hawthorn well cluster closer to the Geiersbach property. The proposed location at NW 31<sup>st</sup> Street is approximately 1,500 feet northwest of the Geiersbach property and too far from the closest onsite wells, HG-2S and HG-2D, to adequately assess contaminant migration to the west and southwest. Continuous split-spoon sampling or other techniques of drilling and testing should be conducted at each of these locations to accurately determine the monitoring interval (screen placement) and identify off-site contamination.
- 4. Since elevated concentrations of naphthalene and other constituents were reported in samples collected in the upper intermediate wells in the South Lagoon (HG-9S, naphthalene 11,400 ug/L) and the Process Area (HG-11S, naphthalene 20,200 ug/L; HG-15S, naphthalene 8,690 ug/L), ACEPD recommends that lower intermediate (Hawthorn Group) wells at the South Lagoon and Process Area (Former Cooling Pond area) be installed and paired with wells HG-9S and HG-11S, respectively. This would allow the determination of contaminant impacts to the Lower Hawthorn Group in these two source areas.
- 5. Proposed pilot product recovery efforts through a recovery well should be expanded to add active recovery (pumping) in the upper intermediate aquifer (Hawthorn Group) in the vicinity of the North Lagoon and the Former Cooling Pond area as well as the proposed pilot recovery pumping in the surficial aquifer. A pilot study to include the upper intermediate aquifer (Hawthorn Group) is extremely important, as seven of the ten recently installed wells were observed to have "product" following well development. This additional recovery pilot effort should be implemented and the data evaluated prior to developing the draft Feasibility Study.
- Active pumping alone should not be the only method of product recovery evaluated at the site for the surficial aquifer and Hawthorn Group sediments. Product removal enhancing techniques such as thermal treatment or use of surfactants and/or dilutants must also be evaluated in the feasibility study.

- 7. Additional data on the horizontal and vertical extent of contamination contained in the Hawthorn Group formations near the source areas is needed to evaluate source removal and remedial options. Wells constructed in the intermediate aquifer (Hawthorn Group formations) only provide one or two vertical profiles of contamination in each of the four source areas. Without this additional information, it may not be possible to accurately determine the cost of source removal and treatment options.
- 8. Excavation and treatment of excavated contaminated sediments must be thoroughly evaluated as a site remedy in the Feasibility Study. Excavation of surficial and Hawthorn Group sediments (to a depth of 47') and treatment of contaminated sediments was conducted to remediate a release of chlorinated solvents at the FDOT Fairbanks Sand Pit. This site is located northeast of the Murphree Wellfield, in an area with similar geology.
- 9. The distribution and mass of the source material among the surficial aquifer and Hawthorn Group formations has not been provided. ACEPD requests a detailed definition of the amount of product in these units. This information is essential in fully evaluating source removal as a remedial option. The Hawthorn Group sediments must be evaluated at the same level of detail as the surficial aquifer to obtain enough information to select remedial technologies for abatement of dissolved, residual, and mobile contaminants.
- 10. The work plan for assessment of the source areas, Fifth Addendum (April 27, 2004), showed cross sections of the surficial aquifer characterizing the extent of contamination. The recently acquired data from this assessment should be used to update these cross sections.
- 11. ACEPD requests continued bailing of the Hawthorn Group wells that are found to contain DNAPL product. This product is mobile; ACEPD staff observed bailing activities conducted on 8/24/04. The initial bailer removed from well HG-10S in the North Lagoon contained over two feet of creosote. Continued tabulation, recording and reporting of removed DNAPL should be regularly reported.

## ACEPD Comments Koppers Groundwater Flow Model Development and Calibration Interim Report Dated July 2, 2004

- 12. The presence of site contaminants off-site in the Geiersbach irrigation well is evidence that there is some westerly component of groundwater flow in the intermediate aquifer system (Hawthorn Group) at the site. How does this affect the model?
- 13. The assumption that "15 percent of the produced flow was originating from the upper transmissive zone and 85 percent from the lower" (page 16) may under estimate the amount of water produced from the upper portion of the upper Floridan. The "worst case" scenario would be to use 25 percent, the high end of the reported range of 10 to 25 percent.
- 14. The proposed groundwater model is based on limited information about the actual geologic conditions in the Intermediate aquifer at the Koppers site. There are also limitations on the interpretation and type of information obtained using the geophysical techniques applied at the site. Considering the limited information available and complexity of the site, the reliability of conclusions drawn from the modeling results will always be limited.

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