TB Scan

Florida Department of

Memorandum Environmental Protection

RECEIVED
DEC 17 2001
ENVIRONMENTAL
PROTECTION DEPT

TO: Kelsey Helton, Hazardous Waste Cleanup Section
THROUGH: Jim Crane, Bureau of Waste Cleanup
FROM: Zoe Kulakowski, Bureau of Waste Cleanup
DATE: December 14, 2001
SUBJECT: Cabot Carbon/Koppers, Gainesville, Alachua County

As requested, I have reviewed the following items for the referenced site: (1) October 18, 2001 *First Semi-Annual Stage 2 Groundwater Monitoring Report* by The Retec Group and (2) November 2001 *Workplan For Additional Characterization of the Hawthorn Group Formation for Beazer East, Inc.* Review comments are provided below for each.

Groundwater Monitoring Report

1. Pursuant to Chapters 471 and 492, Florida Statutes, all documents submitted to the State of Florida that contain engineering and geological interpretations need to be signed and sealed by so qualified professionals. It is not clear from my review copy if the signing Geologist is Florida registered and if his seal was embossed on at least one copy submitted to the state.

2. On page 3-2 a statement is made that "the model indicates complete hydraulic capture along the site's eastern perimeter and north/northeast boundary." Modeling is not sufficient to verify plume capture. As previously commented May 18, 2001, why haven't any monitor wells been installed east and downgradient of EW-17/EW-16 where BETX, naphthalene, pentachlorophenol, and arsenic were detected in high concentrations? These wells are needed to validate the ground water flow and contaminant transport model prediction that contaminants that escape the upgradient well will be captured by a down gradient recovery well. This comment also applies to down gradient locations from EW-15/14/13 and EW-3/M-33B.

3. The ground water elevation data presented on Figures 3 and 4 also do not establish capture for the same reason that no locations downgradient of the extraction well line were used for data collection. Future ground water potentiometric maps need to collect data from the Cabot Carbon side, especially from all wells due east of the joint property line.

4. Future reports need to include (1) a summary table of well construction details and (2) a figure that shows all

extraction well locations, piezometers, monitor well and pairs, and the ITW series wells.

Workplan For Additional Characterization of the Hawthorn Group

5. The discussion on page 2-6 that "there does not appear to be significant lateral DNAPL migration" does not agree with the reoccurring reports of DNAPL observed in Springstead Creek after heavy rainfall events. Additional investigation of Springstead Creek is warranted (1) to determine the nature of the DNAPL (old releases within the creek sediment being redisturbed or new ground water discharges), (2) the lateral and vertical extent of bank releases, as applicable, and (3) the lateral and vertical extent of creek sediment, as applicable. If ground water discharges of DNAPL are ongoing, the proposed slurry wall will not be effective unless its extent is expanded to the creek.

6. I concur with the proposed locations for the Hawthorn exploratory borings and the Hawthorn wells, realizing that the later proposed locations may be altered based on the exploratory boring observations. One additional Hawthorn well should be located down gradient of the former North Lagoon between proposed HG-5 and HG-4. Existing wells FW-1 and ITF-2 are too far down gradient to provide an adequate evaluation and may not be open to the appropriate interval. The exploratory borings and wells (HG-2, HG-3, HG-5) should be located to investigate the creosote smell observed during the drilling of a private well offsite to the west (I defer to Robin Hallbourg).

7. The proposed Hawthorn wells are to tap the first permeable zone observed. The planned depths of 90-105 feet are much deeper than permeable units routinely tapped by private wells. Many of the private wells screened deeper than the surficial have depths ranging from 45-86 feet (Personal communication, SJRWMD). Immediately west of the site, creosote odors were observed for the 70-90 foot interval. Government personnel should have the opportunity to see the exploratory boring data and to agree with the selected depth interval.

8. (Page 3-6) The specific wells to be sampled for water quality analyses should be identified in this plan.

9. (Page 3-7) Proposed laboratory testing of Hawthorn core samples should be performed on at least one sample per boring from the top of the Hawthorn sequence. Total organic carbon and cation exchange capacity should be performed in additional to the other analyses proposed. The DNAPL evaluation using undisturbed

core samples from Phase I activities may need to occur in Phase I so that chemistry-holding times are not exceeded.

C: Ligia Mora-Applegate
Jeff Lockwood
/zpk