

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary Gloria L. McCutcheon, Regional Director Southeast Region Headquarters 2300 N. Dr. Martin Luther King, Jr. Drive PO Box 12436 Milwaukee, Wisconsin 53212-0436 Telephone 414-263-8500 FAX 414-263-8716 TTY 414-263-8713

October 7, 2003

Ms. Mary Mokwa Continental Properties Company, Inc. W133 N8569 Executive Parkway P.O. Box 220 Menomonee Falls, WI 53052

Subject: Soil Vapor Investigation Results, Decorah Shopping Center Annex, 1011-1025 South Main Street, West Bend, Wisconsin. WDNR FID # 267161400, BRRTS # 02-67-151266.

Dear Ms. Mokwa:

The Departments of Natural Resources (DNR) and the Department of Health and Family Services (DHFS) have completed the review of the referenced report.

Our conclusions are as follows: Based solely on very limited evidence, a complete vapor migration and intrusion pathway was not observed downgradient from the source area. However, there are remaining uncertainties in the conceptual site model regarding the environmental fate of PCE and TCE. Vapors down-gradient from the source were less than expected and may be migrating north from the source area along the utility corridor. Finally, the groundwater concentrations of PCE at MW-13 and GP-18 are similar enough that GP-18 should not be considered the sole vapor source in any conceptual model.

The DNR and DHFS recommend as follows:

- 1. To repeat the soil vapor monitoring at GP 23-25, preferably under winter conditions.
- 2. To investigate vapor migration along the utility corridor behind the Lincoln Drive residences.



3. To consider sub-slab monitoring within 1-3 residences over the 1000 ppb groundwater plume beneath Lincoln Drive, this being the most direct and unequivocal evidence for excluding the vapor intrusion pathway.

The Departments agree with Key Engineering that current soil gas sampling indicates little risk of a complete vapor migration pathway from contaminated groundwater to houses along Lincoln Drive. However, there are uncertainties associated with a single measurement from each sample point. There are also uncertainties in our conceptual understanding of the migratory fate of TCE and PCE. In order for the agencies to confidently state that vapor intrusion in homes within the vicinity of the sampling locations has been excluded, the sampling at GP-23, GP-24, and GP-25 must be repeated. Sampling within homes in the vicinity is again recommended, but based on the current results will not be required at this time. Verification of the previous results will strengthen the conclusion that these homes are not receptors of vapor migration. Similarly, a preliminary investigation of the utility corridor north from GP-23, along with the identification of buildings served by that corridor, will help to exclude that utility corridor as a preferential vapor migration pathway

If you have any questions concerning this letter please contact me at 414-263-8607 or Dr. Robert Thiboldeaux at 608-267-6844.

Sincerely,

Binyoti Amungwafor Hydrogeologist

CC: Dr. Robert Thiboldeaux, DHFS

Mr. Kristopher T. King, Key Engineering Group LTD.

Mr. Donald P. Gallo, Reinhart, Boerner & Van Deuren, S.C.

Case File.