



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

February 1, 2013

REPLY TO THE ATTENTION LINE

Mr. Jason Smith
Corporate Environmental Director
Tecumseh Products Company
2700 West Wood Street
Paris, Tennessee 38242

LU-9J

RE: Supplemental Groundwater Investigation Workplan and Proposed
Revisions to the Quarterly Groundwater Compliance Monitoring Program

Dear Mr. Smith:

This letter is in response to the Tecumseh Products Company (TPC) submittals titled *Technical Memorandum - Proposed Revisions to the Quarterly Groundwater Compliance Monitoring Program*, dated December 21, 2012, and *Supplemental Groundwater Investigation Workplan*, dated January 16, 2013. These documents propose modifications to the monitoring program at the Former TPC facility located at 100 East Patterson Street, Tecumseh, Michigan.

Ongoing groundwater monitoring is being performed in connection with the Administrative Order on Consent (AOC), dated March 30, 2010. In September 2012, TPC submitted a document titled *Remedial Investigation and Groundwater Environmental Indicator Report*. The report was submitted in an effort to meet the deadlines prescribed in paragraph 11 and 13b of the AOC. At that time, EPA informed TPC that the full extent of impacts had not been defined and TPC requested a meeting to discuss the technical information in the report.

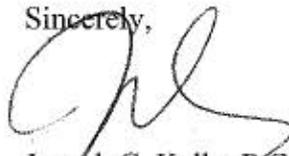
TPC and EPA met in Chicago on October 29 and 30, 2012 where EPA presented information that demonstrated that TPC had not defined the extent of impacts and disputed TPC's demonstration that contaminant migration was stable. EPA also requested that 19 additional monitoring wells be installed. TPC agreed to prepare a work plan for the wells and requested an opportunity to provide information supporting a reduction in sampling frequency in some of the existing monitoring wells.

In the *Technical Memorandum*, TPC proposed reducing the sampling frequency for many of the existing wells. In response to EPA's request for 19 additional groundwater monitoring wells, TPC proposed in the *Workplan* the installation and quarterly sampling of 12 additional wells and TPC did not explain why it proposed to reduce the number of wells. Following review of the documents cited above, EPA is providing the following comments.

- EPA proposes that sampling for VOCs continue in all existing monitoring wells on a semiannual basis given the distance between many of the wells, excluding MW-14S and MW-16S which will be eliminated from quarterly monitoring as proposed.
- EPA agrees with the elimination of routine semi-annual sampling for monitored natural attenuation (MNA) parameters because MNA is not currently an acceptable remediation approach for this site.
- EPA identified 19 well locations where additional information should be collected. As noted, no information was provided to support a reduction in the number of wells requested. As EPA still believes the 19 wells are needed, TPC will proceed with the scope of work for the installation of the 19 wells requested in the October 2012 meeting. The locations are summarized in an attachment to this letter.
- EPA requests that MW-10D be advanced to an elevation of 740 feet mean sea level (MSL) for further characterization of the site's geologic conditions, rather than 750 MSL as proposed in the *Workplan*.
- EPA requires field screening below the water table using a PID or an equivalent technology to justify the placement of all well screens. TPC should employ a methodology similar to that used in the July 5, 2012, *Workplan for Proposed Source Area Remedial Investigation Activities*, for PID screening below the water table if needed. Documentation for the selection of screened intervals to date is insufficient, and questions remain regarding the potential sources and extent of the groundwater contamination plume associated with the former TPC site.
- EPA requests that TPC contact the owner of the existing private drinking water well (Well ID: 46000001232) located southeast of the site for purposes of sampling.

EPA appreciates TPC's continuing efforts to delineate the extent of impacts and ensure the protection of human health and the environment in the area surrounding the former TPC facility. If you have any questions, please contact me at kelly.joseph@epa.gov or (312) 353-2111.

Sincerely,



Joseph C. Kelly, P.G.,
Corrective Action Project Manager
Remediation and Reuse Branch

Enclosure: Proposed Monitoring Well Locations for Additional Investigation

Cc: Graham Crockford, TRC
Doug McClure, Conlin, McKenney & Philbrick, PC

Attachment – Proposed Monitoring Well Locations for Additional Investigation.

- EPA agrees with the locations identified for proposed wells MW-4D, MW-10D-R, MW-32D, MW-34D, MW-35S, MW-37S, MW-37D, MW-38S, and MW-38D.
- EPA requests that the proposed location for MW-11D be moved to the location of MW-18S (i.e., MW-18D), since well MW-28D already delineates the impacts at depth in the area near proposed well MW-11D.
- EPA agrees with the placement of a new well pair at MW-36S and MW-36D, but still requires that two nested well pairs be placed at equally-spaced distances between MW-35 and MW-4, approximately 400 feet west of the permeable reactive barrier (PRB) to assess the area upgradient from the PRB, as requested in the meeting. MW-36S and MW-36D would be in addition to the 19 well locations discussed herein, if installed.
- A deep well should be installed at MW-5 and a deep well should be installed at MW-25 given the currently unidentified geologic conditions in the south and west of the site and the nature of the contaminants.
- A well pair should be installed at the intersection of Mill Highway and Russell Road because the impacts at MW-20S and MW-20D are not adequately defined by the shallow and deep wells MW-14 and MW-27, given the site geology and groundwater flow dynamics.
- EPA will review the new data before determining the need for an additional well downgradient from MW-31. Additional wells may be needed depending upon the results of these investigation activities.