



April 15, 2010

Michelle Mullin  
Project Manager  
USEPA, Region 5  
77 West Jackson Boulevard  
LU-95  
Chicago, IL 60604-3590

**Subject: RCRA 3008(h) Consent Order (RCRA-05-2010-0012) – Tecumseh Products Company, Inc.  
Quarterly Progress Report – MID 005-049-440**

Dear Ms. Mullin:

Pursuant to Section VI of the above referenced Consent Order effective March 29, 2010, RMT, Inc. (RMT), on behalf of Tecumseh Products Company, Inc. (TPC) submits this Quarterly Progress Report. This report covers activities related to the Consent Order completed by the Respondent during the first Quarter 2010 and planned for completion in the near future. The organization of this document includes as major headings the items required under Sections V through VIII of the Consent Order.

## V. Project Manager

- The TPC Project Manager is Graham Crockford.
- The USEPA Project Manager is Michelle Mullin.

## VI. Work to be Performed – Remedial Investigation Report and Environmental Indicators Reports

### 1. A Description of activities related to the completion of the Remedial Investigation (RI) Report and the Environmental Indicator (EI) Reports:

- **Investigation Activities**
  - **Characterize Releases at or from the Facility** – Results of the preliminary on-site investigations are presented in the following documents: Environmental Site Assessment for Tecumseh Products Company, Tecumseh, Michigan (ENVIRON, October 2007), Phase I Environmental Site Assessment for the Tecumseh Products (Atwell-Hicks, October 2009), Phase II Environmental Site Assessment, Tecumseh

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Products Company (ATC, September 2009), and the Current Conditions Report (RMT, September 2009).

- **Define Appropriate Screening Criteria** – As described in the September 2009 Current Conditions Report (CCR), MDNRE Part 201 Criteria will typically be used to assess risk related to ingestion of or direct contact with affected media. Alternate screening criteria for the volatilization to indoor air migration pathway were proposed in the March 2010 Preliminary Off-Site Soil Gas Sampling Workplan. Currently groundwater data do not indicate that groundwater is venting to the River Raisin above generic Part 201 groundwater/surface water interface (GSI) criteria. However if further investigation indicates that groundwater concentrations near the River Raisin do exceed generic GSI criteria, a mixing zone determination requesting site specific GSI criteria may be submitted to MDNRE.
  - **Define Any Unacceptable Risks to Human Health** – Potential exposure pathways are evaluated in the September 2009 CCR. As described in the CCR, potentially complete human exposure pathways include the ingestion of affected groundwater and volatilization to indoor air. Water supply sources that are or have the potential to be affected by the off-site migration of contaminants were defined in the CCR. An investigation of the potentially complete, volatilization to indoor air migration pathway is ongoing.
  - **Define Any Unacceptable Risks to the Environment** – The potential for unacceptable risk to the environment related to the discharge of affected groundwater to nearby surface water and wetlands was partially defined in the September 2009 CCR and the February 2010 Technical Memorandum titled Status Update – Characterization of Volatile Organic Compounds in Groundwater. Further investigation to define the maximum extent of affected groundwater is ongoing.
  - **Groundwater Modeling to Determine the Stability of Contaminated Groundwater** – Aquifer properties for input into the model including hydraulic gradient, in situ hydraulic conductivity, and fraction organic carbon have been determined. A preliminary conceptual site model for use in groundwater modeling has been developed and will be updated and revised as additional data becomes available.
- **Presumptive Corrective Measures**
- **Decommission Affected Private Wells** – One of the two off-site private wells with affected water was decommissioned in 2009. Negotiations are underway to decommission the second affected well, which is used for irrigation and is not used as a

source of drinking water. Other private wells are being monitored to confirm that VOCs are not detected.

- **Declaration of Restrictive Covenant** – As part of the Purchase Agreement between TPC and Tecumseh Bakery a Declaration of Restrictive Covenant for the facility was filed. This Restrictive Covenant restricts the installation and use of on-site wells (excluding monitoring wells or other wells installed as part of the environmental work) and restricts residential and commercial land use at the facility. The License Agreement Regarding Environmental Work provides provisions for additional restrictions to be placed on the property as needed.
- **Enact Local Well Ordinance** – A draft well ordinance has been prepared restricting the installation of new wells and to decommission existing wells within the area potentially affected by the off-site migration of groundwater.
- **Mitigation of Indoor Air (On-Site)** – Recommendations to control the potential for volatilization to indoor air in P-Building (the proposed primary use area for Tecumseh Bakery) were submitted to Tecumseh Bakery in March, 2010. TPC expects that these recommendations will be implemented prior to initiation of regular bakery operations while other corrective measures are evaluated. Characterization of the potential for volatilization to indoor air in the remainder of the on-site facility is in progress.
- **Mitigation of Indoor Air (Off-Site)** – Characterization of the potential for volatilization to indoor air at off-site locations is in progress.
- **Control Unacceptable Risks to the Environment** – At present no unacceptable risks to the environment have been identified.
- **Stabilize Migration of Contaminated Groundwater** – The stability of the affected groundwater has not yet been determined. A monitoring well network has been installed, and monitoring is underway to determine stability.

## ■ Reporting

- **Environmental Indicators Report: Current Human Exposures Under Control** – RMT will prepare the Environmental Indicators (Human Exposures) Report following completion of the tasks listed above which relate to the control of current human exposures. This Environmental Indicators (Human Exposures) Report will be submitted to the USEPA no later than September 29, 2011.
- **Environmental Indicators Report: Groundwater Stabilized** – RMT will prepare the Environmental Indicators (Groundwater Stabilized) Report following completion of the tasks listed above which relate to the stabilization of groundwater. This Environmental

Indicators (Groundwater Stabilized) Report will be submitted to the USEPA no later than September 29, 2012.

- **Remedial Investigation Report** – RMT will prepare the Remedial Investigation Report following completion of RI investigation activities which determine the nature and extent of any releases of hazardous waste and hazardous constituents at or from the facility. This Remedial Investigation Report will be submitted to the USEPA no later than September 29, 2012.

## 2. Estimate of Percentage of Work Completed:

- Work related to Remedial Investigation Report: 25% complete
- Work related to the Environmental Indicators Report – Current Human Exposures Under Control: 30% complete
- Work related to the Environmental Indicators Report – Groundwater Stabilized: 30% complete

## 3. A Summary of Activities During the Reporting Period

- Work related to controlling on-site human exposures:
  - January 2010 – indoor air samples were collected in P-Building;
  - February 2010 – additional indoor air samples were collected in P-Building during a ventilation test to determine the ventilation rate needed to reduce the concentration of TCE in indoor air to less than the indoor air criterion;
  - March 2010 – results of the P-Building evaluation, including calculated indoor air criteria and recommendations for the mitigation of the indoor air in P-Building were submitted to the USEPA for review; and
  - March 2010 – additional indoor air sampling and sub-slab soil gas sampling were conducted in the areas (excluding P-Building) to be occupied by Tecumseh Bakery.
- Work related to controlling off-site human exposures:
  - January 2010 – March 2010 – Negotiations regarding the decommissioning of the remaining affected private well, used for irrigation purposes, are ongoing;
  - January 2010 – March 2010 – TPC prepared a draft well ordinance, including a proposed restricted area. Negotiations with the City of Tecumseh to implement the well ordinance begin; and

- March 2010 – RMT issues a Preliminary Off-Site Soil Gas Sampling Workplan including calculated indoor air criteria, soil gas screening levels, and groundwater screening levels.
  - Work related to the migration of affected groundwater:
    - January 2010 – Groundwater data from monitoring wells installed in November and December were received. A re-sample event was performed at select wells to confirm groundwater concentrations;
    - February 2010 – a Technical Memorandum titled Status Update – Characterization of Volatile Organic Compounds in Groundwater; Former Tecumseh Products Company Site, Tecumseh, Michigan is submitted to USEPA for review;
    - March 2010 – three additional notices of off-site migration are issued;
    - March 2010 – Eleven additional monitoring wells are installed around the perimeter of the affected area to further define/refine the extent of VOCs in groundwater; and
    - March 2010 – the first quarter groundwater sample event is conducted including ten of the eleven new wells.
- 4. A Summary of Contacts with Representatives of Local Community, Public Interest Groups, or State Government During the Reporting Period**
- As described above TPC communicated with the City of Tecumseh regarding the proposed well ordinance.
  - RMT obtained a right-of-way permit from the City of Tecumseh to install additional monitoring wells and soil gas sample points in the right-of-way.
  - As described above, three additional notices of off-site migration were issued in March 2010, MDNRE received a copy of these notices.
- 5. A Summary of Problems and Potential Problems Encountered During the Reporting Period**
- None
- 6. Action Taken to Rectify Problems Identified Above**
- Not Applicable

## 7. Changes in Personnel During Reporting Period

- None

## 8. Projected Work for the Next Reporting Period

- Work related to controlling on-site human exposures:
  - Re-calculate non-residential indoor air criteria in accordance with USEPA comments received April 8, 2010;
  - Evaluate indoor air and sub-slab soil gas sample data from the areas (excluding P-Building) to be occupied by Tecumseh Bakery. Develop a strategy to address indoor air criteria exceedences, if any; and
  - Initiate an evaluation of potential source area control measures.
- Work related to controlling off-site human exposures
  - Finalize negotiations to decommission the irrigation well which is affected by VOCs.
  - Continue negotiations with the City of Tecumseh to implement the proposed well ordinance.
  - Finalize soil gas screening levels and groundwater screening levels to be used to evaluate the volatilization to indoor air migration pathway.
  - Evaluate off-site soil gas sample data.
- Work related to the migration of affected groundwater:
  - Prepare a Technical Memorandum summarizing the findings of the additional monitoring well installations and first quarter sample event, including a discussion of the status of data gaps identified by USEPA and proposed future investigation activities. This Technical Memorandum will be submitted to the USEPA within 60 days of the first quarter sample event, i.e. no later than May 21, 2010.
  - Initiate any proposed future investigation activities to define the nature and extent of affected groundwater.
  - Conduct the second quarter sampling event.

## VI. Work to be Performed – Final Corrective Measures Proposal

Preparation of the Final Corrective Measures Proposal will be initiated following completion of the Remedial Investigation Report and the Environmental Indicators Reports.

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## VI. Work to be Performed – Final Corrective Measures Implementation

Work related to the Final Corrective Measures Implementation will be initiated following USEPA's Final Decision.

## VI. Work to be Performed – Establish Public Repository of Information

Work related to the establishment of a public repository of information will be initiated during the second quarter of 2010.

## VII. Access

Prior to the installation of three monitoring wells (MW-16s, MW-17s, and MW-22) TPC obtained an access agreement with an offsite property owner so that RMT could access these wells for routine groundwater sampling. TPC is in the process of obtaining a revised access agreement which also provides access for USEPA and its representatives. No other access agreements are required at this time.

## VIII. Cost Estimates and Assurances of Financial Responsibility

Preparation of the Initial Cost Estimate is under way. This Initial Cost Estimate will be submitted to the USEPA for approval no later than April 28, 2010. Financial Assurance will be obtained in accordance with the schedule outlined in the Consent Order.

Sincerely,

RMT, Inc.



Graham Crookford  
Project Manager

cc: Lynn Dennison, Tecumseh Products Company  
Jason Smith, Tecumseh Products Company  
Douglas McClure, Conlin, McKenney and Philbrick, PC  
Jeff Woolley, Consolidated Biscuit Company  
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