

## Final Report

# Quarterly Technical Progress Report October 2014 – December 2014 RCRA Corrective Action IND 980 700 801

2915 Dr. Martin Luther King Jr. Boulevard, Anderson, In  
Revitalizing Auto Communities Environmental Response Trust

Prepared for: Indiana Department of Environmental  
Management

## Conestoga-Rovers & Associates

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**Table of Contents**

	<b>Page</b>
<b>Section 1.0 Introduction.....</b>	<b>1</b>
<b>Section 2.0 Summary of RFI, Interim Measures, and Corrective Measures Activities.....</b>	<b>1</b>
2.1 RCRA Facility Investigation/Environmental Indicators Determination.....	1
2.2 Interim Measures.....	1
2.3 Corrective Measures.....	1
<b>Section 3.0 Summary of Findings.....</b>	<b>2</b>
3.1 RCRA Facility Investigation/Environmental Indicators Determination.....	2
3.2 Interim Measures.....	2
3.3 Corrective Measures.....	3
<b>Section 4.0 Summary of Changes To RFI, Interim and/or Corrective Measures .....</b>	<b>3</b>
<b>Section 5.0 Summary of Contacts with Representatives of Local Community, Public Interest Groups, or State Government.....</b>	<b>3</b>
<b>Section 6.0 Summary of Problems or Potential Problems.....</b>	<b>3</b>
<b>Section 7.0 Actions Taken To Rectify Problems .....</b>	<b>3</b>
<b>Section 8.0 Changes in Personnel .....</b>	<b>4</b>
<b>Section 9.0 Projected Work for January through March 2015.....</b>	<b>4</b>
<b>Section 10.0 Reports and Data .....</b>	<b>4</b>

**List of Figures  
(Following Text)**

Figure 1 Site Plan – South Court Soil and WWTP Plume Boundary Investigation

**List of Appendices**

Appendix A Fact Sheet 18 – January 2015

## **Section 1.0 Introduction**

Conestoga-Rovers and Associates (CRA), on behalf of the Revitalizing Auto Communities Environmental Response (RACER) Trust, has prepared this Quarterly Technical Progress Report for the RACER Trust facility located at 2915 Dr. Martin Luther King Junior Boulevard in Anderson, Indiana (Facility or Site).

This Quarterly Technical Progress Report has been prepared to summarize activities related to the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI), Interim Measures (IM) activities, and Corrective Measures (CM) at the Facility for the period of October through December 2014.

## **Section 2.0 Summary of RFI, Interim Measures, and Corrective Measures Activities**

### **2.1 RCRA Facility Investigation/Environmental Indicators Determination**

There were no RFI activities conducted during this reporting period.

RFI activities are 100-percent complete.

### **2.2 Interim Measures**

Interim Measures conducted during this reporting period include Site-wide hydraulic monitoring, semi-annual groundwater sampling, and fall surface water sampling in accordance with the Site-Wide Groundwater Monitoring Plan (AECOM, 2010) and subsequent recommendations made in the 2013 Annual Groundwater Monitoring Report (CRA, 2014). These IM activities were conducted between October 20 and October 29, 2014.

Interim measures are ongoing.

### **2.3 Corrective Measures**

To support development of a revised Corrective Measures Proposal, activities conducted during this reporting period included preparation, submission and implementation of the South Court Soil Investigation and Wastewater Treatment Plant (WWTP) Plume Boundary Well Installation Work Plan (CRA, November 14, 2014) (Work Plan). The objectives of the soil investigation and well installation are to document the current soil quality within the South Court Area to determine if soils are acting as an ongoing source to groundwater impacts and to monitor the

WWTP volatile organic compound (VOC) groundwater plume stability beneath the Meadowbrook Golf Course, respectively.

Implementation of the Work Plan included the advancement of ten boreholes within the South Court Area (BH1-14 through BH10-14) between November 19 and 20, 2014, installation of groundwater monitoring well MW97-14 south of the irrigation pond on the Meadowbrook Golf Course on November 19, 2014, well development and collection of a groundwater sample from MW 97-14. The borehole and monitoring well locations are provided on Figure 1.

Using direct push drilling technology to complete the soil investigation, two subsurface soil samples were collected at each borehole from the unsaturated soil intervals with the highest photoionization detector (PID) evidence of impacts for VOC total Target Compound List (TCL) analysis. Based on the highest PID evidence of VOC impacts, five soil samples were selected for additional analysis comprised of synthetic precipitation leaching procedure (SPLP) for VOCs.

MW97-14 was developed on November 20, 2014, more than 24 hours following monitoring well installation. Development consisted of the removal of ten well volumes. Prior to groundwater sampling on November 24, 2014, MW97-14 was purged using low flow purge techniques and a submersible pump until field parameters including conductivity, temperature, turbidity, dissolved oxygen, oxygen reduction potential, and pH stabilized. Once field parameters stabilized, a groundwater sample was collected directly into pre-cleaned bottles provided by the laboratory for chemical analysis of TCL VOCs. One field duplicate and one matrix spike/matrix spike duplicate (MS/MSD) was also submitted for quality assurance/quality control.

## **Section 3.0 Summary of Findings**

### **3.1 RCRA Facility Investigation/Environmental Indicators Determination**

There were no RFI activities conducted during this reporting period.

### **3.2 Interim Measures**

Interim groundwater and surface water monitoring and reporting is ongoing. The results of the routine Site-wide monitoring activities conducted in October 2014 will be provided through submittal of the 2014 Annual Groundwater Monitoring Report to IDEM on or before January 31, 2015.

### **3.3 Corrective Measures**

A report summarizing the results from the South Court Soil Investigation and WWTP Plume Boundary Well Installation will be provided to IDEM during the next quarter.

### **Section 4.0 Summary of Changes To RFI, Interim and/or Corrective Measures**

There were no changes to the RFI, Interim Measures and/or Corrective Measures during the reporting period.

### **Section 5.0 Summary of Contacts with Representatives of Local Community, Public Interest Groups, or State Government**

On October 23, 2014, CRA, on behalf of RACER Trust, submitted the 2014 Budget Amendment Request to IDEM. On November 12, 2014, IDEM approved the 2014 Budget Amendment Request.

On October 23, 2014, CRA, on behalf of RACER Trust, submitted the Residential Well Sampling Work Plan to IDEM. On November 17, 2014, IDEM approved the Residential Well Sampling Work Plan and provided clarifying comments.

On October 29, 2014, on behalf of RACER Trust, CRA submitted a revised draft ERC for Tract B to IDEM. On December 8, 2014, IDEM provided comments to CRA and RACER regarding the draft ERC for Tract B.

On November 10, 2014, CRA, on behalf of RACER Trust, submitted the South Court Soil Investigation and WWTP Plume Boundary Well Installation Work Plan to IDEM. On November 18, 2014, IDEM approved the South Court Soil Investigation and WWTP Plume Boundary Well Installation Work Plan and provided clarifying comments.

### **Section 6.0 Summary of Problems or Potential Problems**

No problems were encountered during this reporting period.

### **Section 7.0 Actions Taken To Rectify Problems**

No problems were encountered during this reporting period.

## **Section 8.0 Changes in Personnel**

There were no changes to personnel during the reporting period.

## **Section 9.0 Projected Work for January through March 2015**

Projected work for January through March 2015 includes the following:

- Preparation and submittal of 2014 Annual Groundwater Monitoring Report
- Reporting for the South Court Soil Investigation and WWTP Boundary Well Installation
- Preparation of draft Corrective Measures Proposal
- Residential well sampling and reporting
- Finalize the draft Environmental Restrictive Covenants for the Site
- Disposal of investigation derived waste

## **Section 10.0 Reports and Data**

The Quarterly Technical Progress Report, July 2014 through September 2014, was submitted to IDEM on October 23, 2014.

An update of the RCRA Corrective Action activities completed at the Facility is presented in Project Fact Sheet 18 (January 2015) submitted with this Quarterly Technical Progress Report as Appendix A.

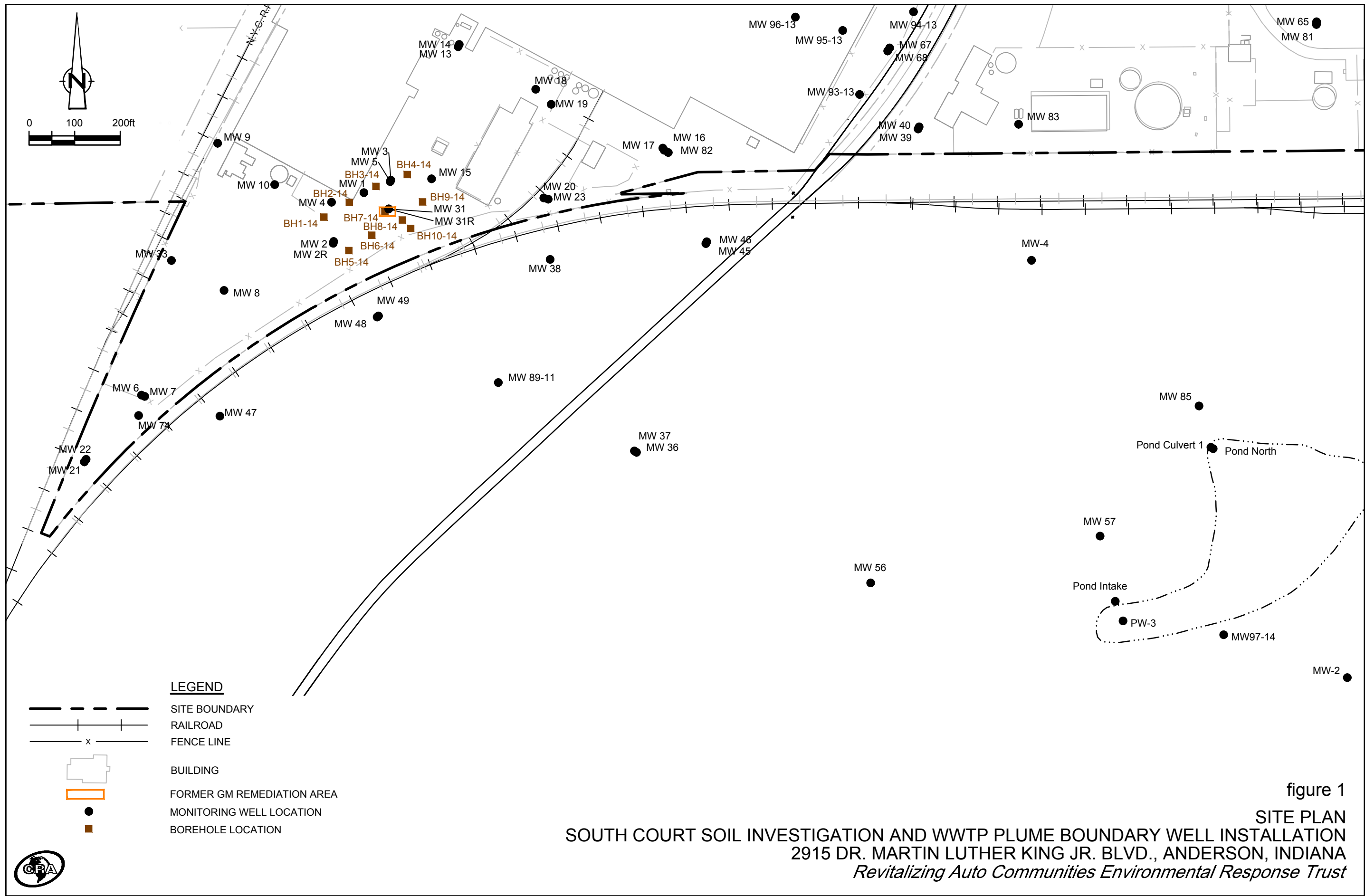


figure 1  
 SITE PLAN  
 SOUTH COURT SOIL INVESTIGATION AND WWTP PLUME BOUNDARY WELL INSTALLATION  
 2915 DR. MARTIN LUTHER KING JR. BLVD., ANDERSON, INDIANA  
 Revitalizing Auto Communities Environmental Response Trust

# Appendix A

## Fact Sheet 18 – January 2015



# Revitalizing Auto Communities Environmental Response Trust

Project Fact Sheet 18 | January 2015 | [www.racertrust.org](http://www.racertrust.org)

## RCRA CORRECTIVE ACTION REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST

2915 Dr. Martin Luther King Jr. Boulevard (Formerly Pendleton Ave.) Anderson, Indiana

### INTRODUCTION

The Revitalizing Auto Communities Environmental Response (RACER) Trust has prepared this Project Fact Sheet to update the local community about environmental activities being conducted at the facility located at 2915 Dr. Martin Luther King Jr. Boulevard (formerly Pendleton Avenue), Anderson, Indiana (Site). These activities are conducted under the oversight of the Indiana Department of Environmental Management (IDEM) and in accordance with an Agreed Order issued for the Site.

The Corrective Action process includes a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) of the soil and groundwater conditions at the Site. Based upon an evaluation of the results obtained during these investigations, appropriate corrective measures will be proposed and implemented.

### SITE BACKGROUND

The Site is located on the southwest side of Anderson in Madison County, Indiana. Formerly, the facility comprised approximately 3,000,000 square feet of manufacturing area situated on 234 acres. GM operations at the Site began in 1929. Additional plant buildings were constructed and the plants were expanded several times between 1937 and 1989. Demolition of the plant commenced in 2007. Demolition of the main plant buildings and restoration activities were completed in 2009.

As a result of General Motors Corporation's (GMC's) 2009 bankruptcy, certain operating assets of GMC were sold on July 10, 2009 to a newly formed company known as General Motors LLC. Existing non-continuing assets, including the Site, became the property of Motors Liquidation Company (MLC), in its capacity as debtor-in-possession in the bankruptcy case. In October 2010, the United States Government announced that MLC had agreed to resolve its liabilities at 89 sites relating to liabilities under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), RCRA, and the Clean Air Act through an environmental response trust fund. On March 31, 2011, the RACER Trust became effective and will conduct, manage, and fund cleanup at the 89 sites formerly owned by MLC, including the Site.



### PROJECT FACT SHEET

Key documents that have been submitted to U.S. EPA and IDEM and are available for review in the public repository.

The following documents have been submitted since 2006:

- Interim Measure Work Plan - Production Well Abandonment, July 27, 2006
- Response to IDEM's Comments on Final RFI Report, April 5, 2007
- Revised Final RFI Report and Response to IDEM's Comments, September 27, 2007
- Production Well Abandonment Memo, November 16, 2007
- Corrective Measures Plan, March 31, 2008
- Site-Wide Groundwater Monitoring Plan, March 31, 2008
- Notification to IDEM of a new potential contaminant source area, September 5, 2008
- Progress Reports from 1998 to present
- Annual Groundwater Monitoring Reports for 2006 to 2013
- Vapor Intrusion Study Work Plan, July 2010
- Residential Vapor Intrusion Assessment Work Plan, September 1, 2011
- Investigation Work Plan, September 2, 2011
- Vapor Intrusion Study Work Plan Implementation – Technical Memorandum, November 3, 2011
- Residential Vapor Intrusion Assessment Technical Memorandum, March 7, 2012
- Supplemental RFI Results Technical Memorandum, March 7, 2012
- Soil and Perched Groundwater Delineation Work Plan, June 26, 2012
- Waste Water Treatment Plant Source Area Investigation Work Plan, January 4, 2013
- Perched Groundwater Investigation Work Plan, April 3, 2013
- Revised Risk Assessment Approach Letter, April 26, 2013
- Waste Water Treatment Plant Source Area Investigation Technical Memorandum, July 31, 2013
- Revised Risk Assessment Interim Deliverable, August 9, 2013
- Waste Water Treatment Plant Groundwater Investigation Work Plan, September 27, 2013
- Refined Human Health Risk Assessment and Derivation of Site-Specific Risk-Based Screening Levels, October 2013
- Refined Human Health Risk Assessment - Addendum, May 12, 2014
- Perched Groundwater Investigation Report of Findings, May 12, 2014
- RFI Final Report, June 2014
- Residential Well Sampling Work Plan, October 23, 2014
- Revised South Court Soil Investigation and WWTP Plume Boundary Well Installation Work Plan, November 14, 2014

## RCRA CORRECTIVE ACTION

The RACER Trust is currently conducting Corrective Action activities at the Site. Corrective Action activities are required for all facilities that applied for a permit to store hazardous waste and include an evaluation of whether plant waste management operations have impacted the environment. The program includes a RFI that is designed to identify and address any significant risks to human health or the environment resulting from the release of hazardous waste or hazardous constituents to environmental media such as soil or groundwater. The scope of the RFI and required cleanup work has been and will continue to be reviewed with IDEM. The activities will be conducted according to standards that are protective of human health and the environment.

The Corrective Action process uses Environmental Indicators (EIs) to evaluate and report on current site conditions related to potential current human exposure and potential groundwater migration. Under the RCRA program, U.S. EPA's top priority is to make sure that these two Environmental Indicators are satisfied at a given site. MLC submitted reports to IDEM for the two Environmental Indicators to demonstrate that current human exposure and migration of contaminated groundwater are under control. Groundwater monitoring to verify plume stability is ongoing.

## RCRA FACILITY INVESTIGATION

RFI activities have been completed at the Site. The purpose of an RFI is to investigate any areas of the Site that may need further action and to determine what additional steps might be appropriate. The results of these investigations, including an assessment of potential risk, were documented in reports that have been submitted to IDEM and copies are available for review in the IDEM's virtual file cabinet. A revised Final RFI Report (Conestoga-Rovers & Associates, June 2014) was submitted to IDEM providing details of historical investigations summarized in the previous Final RFI Reports and is amended with details of investigations conducted since that time. The revised and Final RFI Report was approved by IDEM on July 22, 2014.

A Refined Human Health Risk Assessment was prepared to assess the results of investigations conducted to date to determine whether realistic exposure levels of Site constituents have the potential to adversely affect human health on- or off-Site. This report was submitted to IDEM in October 2013 and approved with the exception of the non-default residential and commercial/industrial vapor intrusion groundwater screening levels in November 2013.

On May 12, 2014 an Addendum to the Refined Human Health Risk Assessment was submitted to IDEM detailing that RACER Trust agreed to use IDEM's Remediation Closure Guide generic residential and commercial/industrial groundwater vapor exposure screening levels. The Refined Human Health Risk Assessment, coupled with the Addendum, was approved by IDEM on May 19, 2014.

RFI activities are 100-percent complete.

## COMPLETED INTERIM MEASURES

Interim Measures (IM) were conducted in the South Court Area in July 2005 to address concentrations of trichloroethene (TCE) in a small area of soil and shallow groundwater that were significantly higher than in the surrounding area.

Soil was excavated to the depth of the perched water table at approximately 8 feet below ground and disposed off-site. Hydrogen-Releasing Compound® (HRC) was mixed into soil at the bottom of the excavation, to enhance degradation of TCE in groundwater. Following placement of the HRC®, the excavation was backfilled and the pavement replaced.

Interim measures were also conducted in 2007 to plug and abandon five former groundwater production wells at the facility. This work was performed according to Indiana Department of Natural Resources guidelines.

The RACER Trust continues to complete interim Site-wide groundwater monitoring in accordance with the Site-wide Groundwater Monitoring Plan.

## CORRECTIVE MEASURES

A draft Corrective Measures Proposal was submitted to IDEM in March 2008. A revised corrective measures proposal will be prepared as necessary incorporating the results of activities completed since the time the initial proposal was submitted, including a revised Human Health Risk Assessment and additional investigations.

## UPCOMING ACTIVITIES

Routine groundwater and surface water monitoring and reporting is ongoing. Environmental Restrictive Covenants for the Site will be finalized. Residential tap sampling and reporting may be completed. A revised Corrective Measures Proposal will be developed.

## PUBLIC PARTICIPATION

An information repository has been established where current project related documents are available for public review. The information repository is located at:

**Anderson Public Library**  
111 East 12th Street

Anderson, IN 46016  
Tel: (765) 641-2450

Project Fact Sheets will be issued periodically during the implementation of the Corrective Action program to keep the community informed of ongoing activities at the Site.

## CONTACT INFORMATION

### IDEM

**Robert Marshall**  
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### RACER Trust

**Robert (Bob) Hare**  
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