

# QUARTERLY TECHNICAL PROGRESS REPORT OCTOBER 2011 – DECEMBER 2011 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

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### 1.0 <u>INTRODUCTION</u>

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 2011.

#### 2.0 SUMMARY OF RFI, INTERIM MEASURES, AND CORRECTIVE MEASURES ACTIVITIES

### 2.1 RCRA FACILITY INVESTIGATION/ENVIRONMENTAL INDICATORS DETERMINATION

RFI activities conducted during this reporting period are related to communication with Indiana Department of Environmental Management (IDEM) on the revised Final RFI Report [ENVIRON International Corporation (ENVIRON)/EARTH TECH, Inc. (EARTH TECH), June 2011], implementation of the Investigation Work Plan (CRA, September 2011), implementation of the Residential Vapor Intrusion Assessment Work Plan (CRA, September 2011), and submittal of the industrial Vapor Intrusion Study Implementation Technical Memorandum (CRA, November 2011). Details of the activities are provided in the following paragraphs.

The RFI activities are considered 95-percent completed.

## 2.1.1 <u>FINAL RFI REPORT</u>

In response to IDEM's 13 comments on toxicity (IDEM, October 27, 2009), RACER Trust agreed to modify the Final RFI Report (ENVIRON/EARTH TECH, 2007). Though these modifications necessitated revisions to several tables, they did not affect the conclusions presented in the Final RFI Report. The revised Final RFI Report was submitted to IDEM on July 8, 2011. IDEM issued additional comments on the revised Final RFI Report on September 14, 2011. Following a conference call with representatives from IDEM, RACER Trust, ENVIRON and CRA, it was agreed that additional documentation was necessary to ensure that the revisions were transparent, by providing a redline/strikethrough version of the Report, and defensible, by providing additional reference material cited.

On November 17, 2011, RACER Trust requested an extension on the 60 day response time to IDEM's September 14, 2011 comments. The request was made in order to allow time to obtain appropriate budget approvals to complete the requested revisions. IDEM approved the request for an extension on November 21, 2011.

## 2.1.2 INVESTIGATION WORK PLAN IMPLEMENTATION

RACER Trust's September 2, 2011 Investigation Work Plan for proposed surface and sub-surface soil and groundwater investigations at the Site included delineation of

chromium impacted soil and perched groundwater at the former Bay M26/M27 area, investigation of the 310 Plater Pit area, delineation of the horizontal and vertical extent of ten areas of stained soil identified beneath the former concrete floor slab, and general surface soil screening in the northern portion of the former manufacturing building. The field activities for this Work Plan were completed between November 16 and 29, 2011. The field and laboratory analytical results are currently being assessed and will be provided to IDEM as an addendum to the revised Final RFI Report.

### 2.1.3 RESIDENTIAL VAPOR INTRUSION ASSESSMENT WORK PLAN IMPLEMENTATION

RACER Trust's September 1, 2011 Residential Vapor Intrusion Assessment Work Plan included soil and groundwater investigations at a residential property located downgradient of the Site to assess the potential for vapor intrusion risks due to chlorinated volatile organic compound (VOC) impacts in nearby groundwater. The field activities for this Work Plan were completed between November 16 and December 8, 2011. The field and laboratory analytical results are currently being assessed and will be provided to IDEM as an addendum to the revised Final RFI Report.

#### 2.1.4 INDUSTRIAL VAPOR INTRUSION STUDY IMPLEMENTATION TECHNICAL MEMORANDUM

CRA prepared a Vapor Intrusion Study Work Plan in July 2010 in response to IDEM's May 26, 2010 comments on Motors Liquidation Company's (MLC's) January 28, 2010 response to IDEM comments on the Final RFI Report. The objectives of the Work Plan were to i) provide a more direct basis for assessing vapor intrusion to indoor air at the only Site building where VOC impacted groundwater could potentially pose a vapor intrusion threat (former Plant 9), and ii) to provide site-specific data to support modification of IDEM's generic attenuation coefficients to support the site-specific Risk Assessment provided in the Final RFI Report.

On November 3, 2011 CRA, on behalf of the RACER Trust, submitted the Vapor Intrusion Study Implementation Technical Memorandum to IDEM to provide the results of the Vapor Intrusion Study conducted at the Site. The Technical Memorandum concluded that exposure via vapor intrusion at the former Plant 9 building, if occurring at all, is insignificant and should not warrant further investigation or remediation.

On December 12, 2011, IDEM provided their review of the Technical Memorandum stating that they concurred with the conclusions in the document and that no further investigation of vapor intrusion at the former Plant 9 building is necessary, at this time.

### 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 2010 Annual Groundwater Monitoring Report (AECOM, 2011). These IM activities were conducted in October 2011. The field and laboratory analytical results will be provided to IDEM in the 2011 Annual Groundwater Monitoring Report.

Interim measures are ongoing.

#### 2.3 <u>CORRECTIVE MEASURES</u>

No corrective measures activities were conducted during this reporting period.

With the exception of submittal of the draft Corrective Measures Proposal (CRA, March 2008), the corrective measures activities have not commenced and are considered 0-percent complete.

#### 3.0 <u>SUMMARY OF FINDINGS</u>

#### 3.1 RCRA FACILITY INVESTIGATION/ENVIRONMENTAL INDICATORS DETERMINATION

In November and December 2011, the implementation of the Investigation and Residential Vapor Intrusion Assessment Work Plans commenced. Technical reports presenting the field activities conducted, analytical data generated therefrom, and a discussion of the validated/verified analytical results will be provided to IDEM as an addendum to the revised Final RFI Report in the first quarter of 2012.

#### 3.2 INTERIM MEASURES

Interim groundwater monitoring and reporting is ongoing. The results of the Site-wide groundwater monitoring activities conducted in October 2011 will be submitted with the 2011 Annual Groundwater Monitoring Report due to IDEM on January 31, 2012.

#### 3.3 <u>CORRECTIVE MEASURES</u>

No corrective measures activities were conducted during this reporting period.

#### 4.0 SUMMARY OF CHANGES TO RFI, INTERIM AND/OR CORRECTIVE MEASURES

As a result of IDEM's October 2009 comments on the Final RFI Report and subsequent discussions with IDEM, RACER Trust has conducted investigations to assess the potential for vapor intrusion risks due to chlorinated VOC impacts in groundwater as discussed in Section 2.1.3 and 2.1.4.

As a result of new Areas of Interest (AOIs) identified during the building decommissioning and demolition activities, additional investigations were recently conducted to assess the soil and/or groundwater quality in the vicinity of these AOIs. Investigations of soil and perched groundwater quality in the vicinity of the former Bay M26/M27 area, and investigations of the soil quality in the vicinity of the 310 Plater Pit and ten soil stained areas were conducted in November 2011 as discussed in Section 2.1.2. In addition, at IDEM's request, a general soil screening program was conducted in the area of the north end of the former manufacturing building as discussed in Section 2.1.2.

The field and analytical results generated during these investigations will be documented in an addendum to the revised Final RFI Report.

#### 5.0 SUMMARY OF CONTACTS WITH REPRESENTATIVES OF LOCAL COMMUNITY, PUBLIC INTEREST GROUPS, OR STATE GOVERNMENT

On October 11, 2011, representatives from IDEM, RACER Trust, and CRA participated in a meeting to discuss the anticipated 2012 scope of work and associated costs in preparation for the 2012 Budget Authorization Request. The 2012 Budget Authorization Request was submitted to IDEM in December 2011 and approved by IDEM on January 9, 2012.

#### 6.0 SUMMARY OF PROBLEMS OR POTENTIAL PROBLEMS

As a result of IDEM's October 2009 comments on the Final RFI Report, a Vapor Intrusion Study was conducted at the Site to, in part, provide site-specific data to validate the use of site-specific vapor intrusion modeling results presented in the site-specific Risk Assessment and Final RFI Report. While the results of the Study proved that there is no current unacceptable on-Site risk due to vapor intrusion, the low frequency of VOC detections and low concentrations detected during the Study limit the utility of the data for other purposes, including validation of the site-specific vapor intrusion modeling previously reported.

#### 7.0 ACTIONS TAKEN TO RECTIFY PROBLEMS

RACER Trust will revisit IDEM's October 2009 comments on the Final RFI Report related to vapor intrusion and will facilitate a meeting with representatives of IDEM, RACER Trust, and its consultants to discuss the appropriateness of using IDEM's generic residential and non-residential vapor intrusion criteria. Once in agreement on the appropriate vapor intrusion criteria, RACER Trust will revise the Final RFI Report, as necessary.

## 8.0 <u>CHANGES IN PERSONNEL</u>

There were no changes to personnel during the reporting period.

### 9.0 PROJECTED WORK FOR JANUARY THROUGH MARCH 2012

Projected work for January through March 2012 includes the following:

- Preparation and submittal of M26/M27 Investigation Report of Findings
- Preparation and submittal of Soil Grid Sampling Report of Findings
- Preparation and submittal of Chromium Investigation Report of Findings
- Preparation and submittal of the Annual Groundwater Monitoring Report
- Preparation and submittal of revisions to the Final RFI Report to address IDEM's September 14, 2011 comments on toxicity
- Design of Interim and/or Corrective Measures, as appropriate, following review of recently collected soil and groundwater data

#### 10.0 <u>REPORTS AND DATA</u>

The Quarterly Technical Progress Report, July 2011 through September 2011, was submitted to IDEM on November 1, 2011.

The Vapor Intrusion Study Implementation Technical Memorandum was submitted to IDEM on November 3, 2011, and approved on December 12, 2011.

An update of the RCRA Corrective Action activities completed at the Facility is presented in Project Fact Sheet 12 (January 2012) submitted with this Quarterly Technical Progress Report as Appendix A.

APPENDIX A

PROJECT FACT SHEET 12 – JANUARY 2011

## Revitalizing Auto Communities Environmental Response Trust



Project Fact Sheet 12 | January 2012 | 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 Abandoment, July 27, 2006
- 2006 Annual Groundwater Monitoring Report, January 31, 2007
- 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
- 2007 Annual Groundwater Monitoring Report, January 31, 2008
- 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 2008 to 2011
- 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

#### **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 were documented in reports that have been submitted to IDEM and copies are available for review in the information repository at the local library. MLC has provided responses to IDEM comments on the Final RFI Report, the latest of which were provided to IDEM in January 2010 agreeing to conduct a vapor intrusion study at the Site.

This Study was conducted in February and March 2011, the results of which demonstrate that there is no current unacceptable risk due to vapor intrusion on Site.

Due to new Areas of Interest identified during building demolition activities, additional investigations of soil and groundwater quality were conducted in November and December 2011, the results of which are currently under review.

#### **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<sup>®</sup> (HRC) was mixed into soil at the bottom of the excavation, to enhance degradation of TCE in groundwater. Following placement of the HRC<sup>®</sup>, 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 to address the results of activities completed since the time of the initial proposal.

#### **UPCOMING ACTIVITIES**

Routine groundwater monitoring and reporting is ongoing. Design of additional Interim and Corrective Measures, as necessary, will be conducted following review of recently collected soil and groundwater data.

#### **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**

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#### **RACER Trust**

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