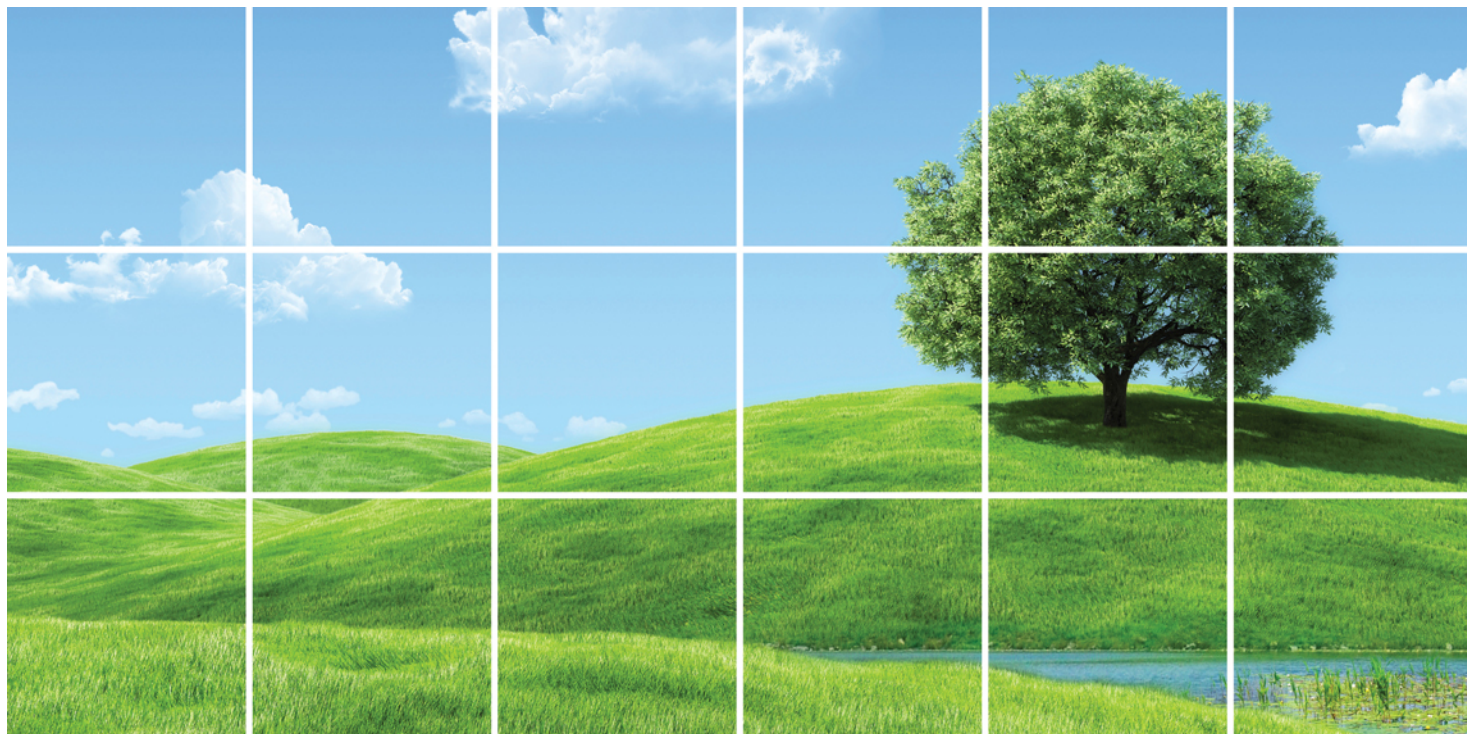




www.CRAworld.com



RCRA CORRECTIVE ACTION
IND 980 700 801

QUARTERLY TECHNICAL PROGRESS REPORT

APRIL 2013 – JUNE 2013
2915 DR. MARTIN LUTHER KING JR.
BOULEVARD, ANDERSON, IN

Prepared for: Indiana Department of Environmental
Management

Conestoga-Rovers & Associates
261 Martindale Rd., Unit #3
St. Catharines, Ontario L2W 1A2

July 2013 • #017302
Report Number:30

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
2.0 SUMMARY OF RFI, INTERIM MEASURES, AND CORRECTIVE MEASURES ACTIVITIES.....	2
2.1 RCRA FACILITY INVESTIGATION/ENVIRONMENTAL INDICATORS DETERMINATION.....	2
2.2 INTERIM MEASURES.....	3
2.3 CORRECTIVE MEASURES.....	3
3.0 SUMMARY OF FINDINGS	4
3.1 RCRA FACILITY INVESTIGATION/ENVIRONMENTAL INDICATORS DETERMINATION.....	4
3.2 INTERIM MEASURES.....	4
3.3 CORRECTIVE MEASURES.....	4
4.0 SUMMARY OF CHANGES TO RFI, INTERIM AND/OR CORRECTIVE MEASURES	5
5.0 SUMMARY OF CONTACTS WITH REPRESENTATIVES OF LOCAL COMMUNITY, PUBLIC INTEREST GROUPS, OR STATE GOVERNMENT	6
6.0 SUMMARY OF PROBLEMS OR POTENTIAL PROBLEMS	7
7.0 ACTIONS TAKEN TO RECTIFY PROBLEMS	8
8.0 CHANGES IN PERSONNEL	9
9.0 PROJECTED WORK FOR JULY THROUGH SEPTEMBER 2013	10
10.0 REPORTS AND DATA	11

LIST OF APPENDICES

APPENDIX A FACT SHEET 15 - JULY 2013

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 April through June 2013.

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 included the preparation and implementation of the Perched Groundwater Investigation Work Plan (CRA, April 3, 2013) and communication with IDEM regarding CRA's approach to revising the Site-specific Risk Assessment (SSRA) (CRA April 26, 2013).

The objective of the Perched Groundwater Investigation Work Plan was to delineate metals impacted groundwater found in the surface fill (Unit 1) in the vicinity of the former Bay M26/M27 by installing an overcased Unit 3 monitoring well (MW92-13) in the vicinity of the Unit 1 groundwater exceedances for vertical groundwater delineation. MW92-13 was installed between April 16, and April 18, 2013, north (downgradient) of the former Bay M26/M27. MW92-13 was instrumented as a Unit 3 (sand) groundwater monitoring well to facilitate the collection of groundwater samples and static water level measurements. In order to reduce the potential for cross-contamination during well installation activities, the monitoring well was overcased with a 7-inch diameter steel casing to 15 feet below ground surface (bgs). Following installation of the overcasing, the 2-inch diameter monitoring well was installed inside the 7-inch casing to a depth of 33 feet bgs with a five foot slotted well screen. The monitoring well was developed on April 19, 2013 (more than 24-hours following installation).

Implementation of the Perched Groundwater Investigation Work Plan included completion of two groundwater sampling events (May and July 2013). The first groundwater sampling event was completed on May 2 and 7, 2013. During the monitoring event, groundwater samples were collected from Unit 1 wells MW90-12 and MW91-12, existing Unit 3 wells MW51 and MW76 and the newly installed Unit 3 well MW92-13. Prior to groundwater sampling, each monitoring well was purged using low-flow purging techniques. Well purging consisted of the removal of sufficient well volumes to allow for the stabilization of field parameters including conductivity, dissolved oxygen, oxygen reduction potential, pH, temperature, and turbidity. Once field parameters stabilized, field filtered samples were collected using low flow sampling techniques and placed directly into pre-cleaned bottles provided by the laboratory for chemical analysis of select dissolved metals (arsenic, copper, chromium, hexavalent chromium, lead, nickel, zinc) and total and amenable cyanide. A summary of the findings from the investigation is provided in Section 3.0.

CRA's April 26, 2013 letter to IDEM proposed a cost-effective strategy for revising the human health risk assessment (HHRA) for the Site. The letter outlined an approach to document cleanup criteria protective of human health and the environment that will be used to develop a remedial strategy for the Site. IDEM approved CRA's approach in an email dated May 15, 2013 and preparation of the revised SSRA is ongoing.

The RFI activities are considered 95-percent completed.

2.2 INTERIM MEASURES

Interim measures being conducted at the Site consist of routine groundwater and surface water monitoring and related reporting in accordance with the Site-wide Groundwater Monitoring Plan (AECOM, 2010) and subsequent recommendations made in the 2012 Annual Groundwater Monitoring Report.

In the 2012 Annual Groundwater Monitoring Report, CRA recommended that groundwater sampling be conducted at MW 16, MW 29, MW 59, and MW 84 to confirm that the groundwater mound in Unit 3 that extends in a north-south arc from the MW 46 area on the south to MW 29 on the north continues to separate the two VOC groundwater plumes. These monitoring wells have historically been non detect for VOCs but have not been sampled for several years. IDEM agreed with the additional VOC monitoring and requested that the samples also be analyzed for metals in addition to VOCs.

Semi-annual groundwater and routine surface water monitoring was conducted between April 8 and April 12, 2013. MW 29, MW 59, and MW 84 were sampled for VOCs and metals during the routine monitoring event. MW 16 was not sampled during the sampling event because the monitoring well was damaged.

2.3 CORRECTIVE MEASURES

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 SUMMARY OF FINDINGS

3.1 RCRA FACILITY INVESTIGATION/ENVIRONMENTAL INDICATORS DETERMINATION

On May 2 and 7, 2013, groundwater samples were collected from MW51, MW76, MW90-12, MW91-12, and MW92-13 as part of the perched groundwater investigation. The May 2013 sampling event confirmed the presence of elevated metals concentrations in Unit 1 (fill) in the vicinity of the former Bay M26/M27. Metals were not detected above laboratory reporting limits in the Unit 3 monitoring well immediately down gradient of the area of interest (AOI) (MW92-13). Similarly, metals were not detected further downgradient, approximately 250 feet northeast of the AOI, in Unit 3 monitoring well MW51. The Unit 3 monitoring well furthest downgradient (MW76) exhibited hexavalent chromium concentrations marginally above the laboratory reporting limit. The field data, validated analytical data and detailed discussion of results will be provided under separate cover to IDEM following the July sampling event.

3.2 INTERIM MEASURES

Between April 8 and April 12, 2013, semi-annual groundwater monitoring and routine surface water monitoring was completed. The additional groundwater metals and VOC monitoring conducted along the Unit 3 groundwater mound was also completed. The results confirmed that the groundwater mound in Unit 3 continues to separate the two VOC groundwater plumes. The field data, validated analytical data and discussion of results will be provided to IDEM in the 2013 Annual Groundwater Monitoring Program Report.

3.3 CORRECTIVE MEASURES

No corrective measures activities were conducted during this reporting period.

**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.

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

On April 3, 2013, CRA, on behalf of RACER Trust, submitted the Perched Groundwater Investigation Work Plan to IDEM.

On April 4, 2013, IDEM approved the Perched Groundwater Investigation Work Plan.

On April 4, 2013, IDEM approved additional groundwater monitoring for VOCs and metals during the April sampling event.

On April 26, 2013, CRA, on behalf of RACER Trust, submitted the Quarterly Technical Progress Report for January 2013 through March 2013 to IDEM.

On April 26, 2013, CRA, on behalf of RACER Trust, submitted the Revised Risk Assessment Approach Letter to IDEM.

On May 15, 2013, IDEM approved the Revised Risk Assessment Approach Letter.

6.0 SUMMARY OF PROBLEMS OR POTENTIAL PROBLEMS

There were no problems identified during the reporting period.

7.0 ACTIONS TAKEN TO RECTIFY PROBLEMS

There were no problems identified during the reporting period.

8.0 CHANGES IN PERSONNEL

There were no changes to personnel during the reporting period.

9.0 PROJECTED WORK FOR JULY THROUGH SEPTEMBER 2013

Projected work for July through September 2013 includes the following:

- Surface water monitoring in accordance with the recommendations made in the GMP and 2012 Annual Groundwater Monitoring Program Report
- Preparation and submittal of the Waste Water Treatment Plant Source Area Investigation Technical Memorandum
- Preparation and submittal of updated Environmental Restrictive Covenants for Lot 1 and former Plant 9
- Preparation and submittal of the revised Risk Assessment and revisions to the Final RFI Report to address IDEM's October 2009 comments
- July groundwater sampling event and reporting for the investigation of the vertical extent of chromium and cyanide impacted perched groundwater.

10.0 REPORTS AND DATA

The Perched Groundwater Investigation Work Plan was submitted to IDEM on April 3, 2013.

The Quarterly Technical Progress Report, January 2013 through March 2013, was submitted to IDEM on April 26, 2013.

An update of the RCRA Corrective Action activities completed at the Facility is presented in Project Fact Sheet 15 (July 2013) submitted with this Quarterly Technical Progress Report as Appendix A.

APPENDIX A

PROJECT FACT SHEET 15 - JULY 2013



Revitalizing Auto Communities Environmental Response Trust

Project Fact Sheet 15 | July 2013 | 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 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
- 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

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 2011, 2012, and the first half of 2013. Further investigation is scheduled for Summer 2013.

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 to address the results of activities completed since the time of the initial proposal.

UPCOMING ACTIVITIES

Investigation of recently identified AOIs is ongoing. Routine groundwater and surface water monitoring and reporting is ongoing. Design of additional Interim and Corrective Measures, as necessary, will be conducted following receipt and review of soil and groundwater investigation data and development of site specific cleanup levels.

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
Tel: (317) 232-4534
Toll free: (800) 451-6027

RACER Trust

Robert (Bob) Hare
Tel: (313) 486-2908