



Semi-Annual Technical Progress Report January 2017 – June 2017

RCRA Corrective Action - IND 980 700 801
2915 Dr. Martin Luther King Jr. Boulevard, Anderson, IN
Revitalizing Auto Communities Environmental Response Trust

Indiana Department of Environmental Management



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Appendix A Project Fact Sheet 23 (July 2017)



1. Introduction

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

This Semi-Annual 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 January through June 2017.

2. 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 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 2011 through 2016 Annual Groundwater Monitoring Reports.

On January 31, 2017, GHD submitted the 2016 Annual Groundwater Monitoring Report to IDEM on behalf of RACER Trust to summarize the groundwater and surface water sampling activities performed in 2016 and the results generated therefrom. The findings of the annual groundwater and surface water monitoring activities are presented in Section 3.2.

Semi-annual groundwater and routine surface water monitoring was conducted between April 17, and April 19, 2017.

Interim measures are ongoing.

2.3 Corrective Measures

Corrective measures alternatives are currently being evaluated as part of the development of the revised Corrective Measures Proposal (CMP).

To support development of the revised CMP, activities conducted during this reporting period included implementation of the Residential Well Sampling Work Plan (GHD October 23, 2014) (Work Plan). The objective of the Work Plan is to confirm if the eight potables water wells in the



vicinity of the Site previously sampled in 2000, are in us and to assess the groundwater for the presence of volatile organic compounds (VOCs). Implementation of the Work Plan was initiated in June 2017 and will be completed in July/August 2017.

3. 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

Groundwater and surface water monitoring activities completed in 2016 were summarized in the 2016 Annual Groundwater Monitoring Report which was submitted to IDEM on January 31, 2017. Conclusions from the 2016 Site-wide groundwater and surface water monitoring are provided below.

1. Groundwater monitoring of the wells along the groundwater mound between the South Court Area and Wastewater Treatment Plant (WWTP) Area plumes confirms that the VOC plumes remain separate from one another.
2. There is now no significant increasing trend in the cis-1,2-dichloroethene (cis-1,2-DCE) concentration at WWTP plume monitoring well MW-4. The other observed trends in the 2016 trichloroethene (TCE), cis-1,2-DCE and vinyl chloride concentrations were consistent with the assessment conducted in 2015.
3. Consistent with 2015 data, there are two increasing trends in the AOC 1 – South Court plume wells. Increasing trends are noted for cis-1,2-DCE at MW 49 and MW 79.
4. Increasing trends continue in several monitoring wells in the former WWTP Area plume. Most of the increasing trends relate to vinyl chloride within and along the tail margin of the plume (MW 28, MW 41, MW 58, MW 64, MW 66, and MW 81). An increasing trend for TCE is also noted at MW 68. The increasing trend in TCE concentrations at MW 68 is based on data from 2006 to 2016. However, when the same trend analysis is performed using only the last seven years of data (i.e., 2010 – 2016), the data set indicates that there is no statistically significant trend and that the TCE concentrations have been stable.
5. Results of the preliminary U.S. EPA score sheet screening and the presence of daughter products in the groundwater indicate that natural attenuation of VOCs is occurring at the Site in both the AOC 1 – South Court plume and the former WWTP Area plume.
6. Three surface water sampling events were conducted in 2016 (April, July, and October) at the Pond Intake and Pond North surface water monitoring locations at the Meadowbrook Golf Course central irrigation pond. Cis-1,2-DCE, trans-1,2-DCE and vinyl chloride were detected at surface water monitoring locations Pond North and Pond Intake during one or more surface water sampling event conducted in 2016. The detected concentrations of vinyl chloride at the Pond North and Pond Intake sampling locations exceeded the relevant screening criteria (i.e.,



recreator). No other parameters were detected above relevant screening criteria at surface water monitors Pond North or Pond Intake.

7. Based on monitoring at adjacent monitoring well MW 85 and MW 97R-16, the golf course irrigation pond appears to be within the former WWTP Area plume.
8. Based on the 2016 groundwater results from residential well MW 89-11, there is no current unacceptable risk to nearby residents due to groundwater volatilization to indoor air.

The results of the routine Site-wide monitoring activities conducted in April 2017 will be provided through submittal of the 2017 Annual Groundwater Monitoring Report to IDEM on or before January 31, 2018.

3.3 Corrective Measures

No data with respect to corrective measures was generated during this reporting period.

The results of the Residential Well Sampling activities that will be completed in July/August 2017 will be provided to IDEM in the second half of 2017.

4. 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. Summary of Contacts with Representatives of Local Community, Public Interest Groups, or State Government

On February 24, 2017, on behalf of RACER Trust, GHD submitted a response to IDEM's comments on the 2015 Annual Monitoring RCRA Corrective Action Report (GHD, January 28, 2016). On March 1, 2017, IDEM stated that the response to comments were acceptable and addressed IDEM's questions on the report.

On February 24, 2017, on behalf of RACER Trust, GHD submitted a request to IDEM to reduce progress reporting for the Site from quarterly, to semi-annually. On February 28, 2017, IDEM approved the request.

On February 24, 2017, on behalf of RACER Trust, GHD submitted a response to IDEM's comments on the Chromium Groundwater Investigation Report of Findings (GHD, August 3, 2016). On April 13, 2017, IDEM provided further comments on GHD's response.



6. Summary of Problems or Potential Problems

No problems were encountered during this reporting period.

7. Actions Taken To Rectify Problems

No problems were encountered during this reporting period.

8. Changes in Personnel

There were no changes to personnel during the reporting period.

9. Projected Work for July through December 2017

Projected work for July through December 2017 includes the following:

- July surface water sampling event
- Completion of residential well sampling program
- Repair/replacement of Tract B (North) monitoring well MW 76
- Preparation and submittal of the CMP
- Site-wide hydraulic monitoring, semi-annual groundwater sampling and fall surface water sampling
- Disposal of investigation derived waste
- Preparation of the 2017 Annual Monitoring Report
- Approval of the 2018 Budget Request

10. Reports and Data

The Quarterly Technical Progress Report, October 2016 through December 2016, was submitted to IDEM on January 23, 2017.

The 2016 Annual Groundwater Monitoring Report was submitted to IDEM on January 31, 2017.

An update of the RCRA Corrective Action activities completed at the Facility is presented in Project Fact Sheet 23 (July 2017) submitted with this Semi-Annual Technical Progress Report as Appendix A.

Appendices

Appendix A

Project Fact Sheet 23 (July 2017)



Revitalizing Auto Communities Environmental Response Trust

Project Fact Sheet 23 | July 2017 | 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. The remaining unsold assets, including the Site, were retained by the GMC, which was renamed 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 now owns, 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 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 2016
- 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
- Wastewater 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
- Wastewater Treatment Plant Source Area Investigation Technical Memorandum, July 31, 2013
- Revised Risk Assessment Interim Deliverable, August 9, 2013
- Wastewater 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
- Wastewater Treatment Plant Groundwater Investigation Report of Findings, March 26, 2015
- City Beautification of Anderson Parking Lot Memorandum, June 1, 2015
- South Court Soil and WWTP Plume Boundary Investigation Report of Findings, June 4, 2015
- Supplemental Analysis in Support of the CMP, August 12, 2015
- Chromium and Hexavalent Chromium Groundwater Data Memorandum, September 23, 2015
- Refined Human Health Risk Assessment – Addendum 2, February 2, 2016
- Chromium Groundwater Investigation Work Plan, March 9, 2016
- Chromium Groundwater Investigation Report of Findings, August 3, 2016
- Request for Reduction of Progress Reporting, February 24, 2017

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.

IDEM recently issued Notices of Corrective Action Complete for Tract A, Tract B (North), Tracts C to F, and Crawford Field. The notices detail IDEM's Final Decision, stating that RACER Trust has fulfilled its obligations under Indiana's RCRA Corrective Action Program for the noted parcels of land.

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 is being 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. Environmental Restrictive Covenants for Tract A, Tract B (North), Tracts C to F, Crawford Field, Lot 1 and former Plant 9 have been completed, approved by IDEM and recorded.

REDEVELOPMENT

RACER Trust is currently looking to sell or donate portions of the Site for redevelopment. On April 1, 2015, the northern portion of the former main manufacturing building area was sold to GDI Construction.

UPCOMING ACTIVITIES

Routine groundwater and surface water monitoring and reporting is ongoing. The residential tap sampling program has started and will be completed in the coming months. A revised Corrective Measures Proposal is in the process of being 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

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