

US EPA ARCHIVE DOCUMENT

Transmitted via Electronic Mail

Mr. Chris Black
U.S. Environmental Protection Agency – Region 5
Land and Chemicals Division
77 W. Jackson Blvd. DE-97
Chicago, IL 60604-3590

Subject:

Second Quarter 2012 Quarterly Progress Report
Revitalizing Auto Communities Environmental Response (RACER) Trust
Buick City Site, Flint, Michigan

Dear Mr. Black:

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, ARCADIS is submitting this Second Quarter 2012 Quarterly Progress Report in accordance with Section VI (18b) of the RACER Trust's Administrative Order on Consent (Consent Order), Docket Number RCRA-05-2011-0024 for the Buick City Site located in Flint, Michigan (the Site), which was effective on September 29, 2011.

Please note that in accordance with General Motors Corporation's Administrative Order on Consent Number R8H-5-00-02 for the North American Operations [NAO] Flint Operations Site (also known as Buick City) Quarterly Progress Reports No. 1 through 46 were submitted to the United States Environmental Protection Agency (EPA) documenting Site activities from January 1, 2000 through June 30, 2011.

This Second Quarter 2012 Quarterly Progress Report covers the period of April 1, 2012 through June 30, 2012.

The following briefly summarizes the work performed and data collected, problems encountered, project schedule, and estimated percent complete for a list of activities.

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ENVIRONMENT

Date:
July 13, 2012

Contact:
Christopher S. Peters,
P.G.

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Our ref:
B0064410.2012

Imagine the result

1. Data Collected This Quarter

Attachment 1 provides sample locations, sampling dates, and associated analytes for each of the samples collected during this quarter. This data will be presented to the EPA in the 2012 Annual CMI Report, except as noted below.

1.1 Storm Sewer Water Samples

In April, May, and June ARCADIS conducted the "NPDES Plus" Monitoring Program (NPMP) as described in the Corrective Measures Implementation (CMI) Work Plan. The NPMP consists of collecting monthly samples from the 11 Site storm sewers to monitor groundwater infiltrating into the Site storm sewers. The following 11 monitoring points were sampled as access allowed: MP001, MP002, MP003, MP004, MP005, MP006, MP007, MP009, MP010, MP011, and MP013. The EPA approved modified NPMP sampling program began being implemented during the June sampling event.

From April to June 2012, as required per Part 1, Section A 2 in the current National Pollution Discharge Elimination System (NPDES) Permit No. MI0001597, weekly composite samples were collected from Monitoring Point 003A. The samples were submitted to the laboratory for analysis of total PCBs. This data will be included in the 2012 Yearly Pollutant Minimization Plan (PMP) for PCBs report, which will be submitted to the MDEQ as required in the NPDES permit.

2. Work Performed This Quarter

2.1 Routine Work

Task 1 Outfall 003/004 Oil Removal Systems

- Continued operations, maintenance, and monitoring (OMM) activities on the 003/004 system. Inspections are being performed once per week to ensure that the system is running properly and to determine if any system modifications are warranted to optimize system performance.

Task 6 Maintain Booms on Outfalls

- Performed daily and precipitation triggered inspections of Outfalls 002, 003, 004, and 005. As demolition activities have been completed and no production related activities are being performed the inspection rate was changed to weekly and precipitation triggered inspections beginning June 22, 2012.
- Performed maintenance activities on an as needed basis.
- Performed inspections of Oil Interceptor #2.

Task 8 NPDES PLUS Monitoring

- Completed the monthly NPDES Plus Monitoring events for April, May, and June. Samples collected as part of this program are listed in Attachment 1.

Task 9 RCRA Closures, Well Abandonment, Restrictive Covenants, Resolve UST Issues

- Completed the weekly inspections of the former RCRA waste management units (WMU). Waste is no longer being stored at the RCRA WMUs. Closure activities have been completed in accordance with the MDEQ approved work plan and final closure reports have been submitted to the MDEQ. As such the inspections of the former WMUs were discontinued on June 6, 2012.

Task 10 Maintain Select Surface Covers

- Performed the quarterly inspection of surface cover areas in June 2012.

Task 11 Lead Soil Removal

- Completed an access agreement with CSX needed to complete remediation activities.

Task 12 Agency Coordination/Negotiation, Reporting, Project Management

- Participated in regulatory agency calls and meetings.
- Participated in calls with the EPA regarding the Northend Statement of Basis.
- Submitted RACER Quarterly Progress Report No. 3 to the EPA on April 13, 2012.

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Performed quarterly inspections of the P-traps.
- Performed weekly inspection of 002 onsite manhole booms.

General Regulatory Compliance Tasks

- Completed inspections and weekly NPDES sampling at MP003A. Samples collected are listed in Attachment 1.

2.2 Non - Routine Work

Task 1 Outfall 003/004 Oil Removal Systems

- Performed HDPE pipe cleanout event including jetting of lines in response to blocked flow.

Task 2 LNAPL Investigation

- Completed evaluation of the second quarter transmissivity data.
- Completed the third quarter transmissivity investigation.
- Began evaluation of the third quarter transmissivity data.
- Completed second quarter sampling event for natural source zone depletion (NSZD) investigation. Samples have been submitted for laboratory analysis.
- Continued boom study investigation along Outfall 003 storm sewer system.
- Developed work plan for 2012 laser-induced fluorescence (LIF) event and received approval from EPA.

Task 3 LNAPL Recovery Bench and Field-Scale Testing

- Completed Bench-Scale Testing Summary Report and Response to EPA comments.
- Begin to develop testing program options for Bench scale/pilot testing of LNAPL removal technologies.

Task 8 NPDES PLUS Monitoring

- Planned upgradient sampling event for July 2012.

Task 9 RCRA Closures, Well Abandonment, Restrictive Covenants,

Resolve UST Issues

- Evaluated analytical data from samples collected at WMU #2, WMU #7, WMU #8, and WMU #10. Northend and Southend closure reports were submitted to the MDEQ on April 2, 2012.
- Completed Certification of Closure for Closure Activities at RCRA WMU's (Northend and Southend).
- Accompany Michigan Department of Environmental Quality (MDEQ) on site inspection of former hazardous waste management unit areas.
- Began developing summary memo for open leaking underground storage tanks (LUST) to submit as part of a request to transfer these areas to the RCRA corrective action program.

- Draft restrictive covenant for the Southend of the site.

Task 10 Maintain Select Surface Covers

- Developed work plan to install select surface covers at the Southend of the Site and submitted to the EPA for review.

Task 11 Lead Soil Removal

- Developed a work plan for the removal of lead and Benzo(a)pyrene impacted soils.

Task 12 Agency Coordination/Negotiation, Reporting, Project Management

- Completed 2011 Corrective Measures Implementation (CMI) Annual Report.
- Restructured site facilities with reduced security presence.
- Participated in Site Meeting with the EPA in May 2012.
- Developed LNAPL Prioritization matrix.
- Submitted budget amendment to the EPA for additional funding and investigation approvals.

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Developed the Outfall 002 and 005 Bulk Head Work Plan and submitted to the EPA for review.

Task 14 Address 15 Areas of Subsurface LNAPL

- Coordinated construction effort to install AOI 09-B system including coordination with utilities, verifying permit status, completed review of treatment system shop drawings, and development of construction bid documents.
- Completed bidding process and awarded subcontract. Construction started July 9, 2012.
- Received MDEQ air permit for the Thermal Oxidizer Unit to be installed at AOI-9B.
- Received final Draft Sanitary Sewer Use permit from the City of Flint, for discharge of MPE system aqueous effluent. The City of Flint is currently finalizing the permit.

Task 15 LNAPL Recovery OM&M Followed by Secondary LNAPL Remediation

- Began development of AOI 09-B MPE treatment system OMM manual.

3. Problems Encountered

While coordinating the installation of the AOI 09-B MPE treatment system there have been significant delays while securing electrical service. The situation has since been resolved and installation of the system is ongoing.

4. Project Schedule – Near-Term Milestone Activities Anticipated During the Next Quarter

4.1 Routine Work

Task 1 Outfall 003/004 Oil Removal Systems

- Continue OMM inspections of system.

Task 8 NPDES PLUS Monitoring

- Perform NPMP monitoring in July, August, and September.

Task 10 Maintain Select Surface Covers

- Perform quarterly inspection of surface cover.

Task 12 Agency Coordination/Negotiation, Reporting, Project Management

- Continue to participate in regulatory agency calls.
- Prepare Quarterly Report for submittal to EPA.

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Continue inspections of booms placed in Outfall 002 and 005 manholes.
- Continue quarterly P-trap inspections.

Task 15 LNAPL Recovery OM&M Followed by Secondary LNAPL Remediation

- Begin OM&M phase of AOI 09-B LNAPL remediation system.

4.2 Non-Routine Work

Task 2 LNAPL Investigation

- Complete Outfall 003 boom investigation to identify sources of LNAPL infiltration into network.
- Perform third quarter of NSZD testing.
- Perform fourth quarter of transmissivity testing.
- Begin the final LIF event.
- Conduct additional investigations

Task 3 LNAPL Recovery Bench and Field-Scale Testing

- Select technologies and locations for additional LNAPL investigation activities and pilot testing.

Task 8 NPDES PLUS Monitoring

- Perform upgradient NPMP sampling.

Task 9 RCRA Closures, Well Abandonment, Restrictive Covenants, Resolve UST Issues

- Finalize and record restrictive covenant for the Southend of the Site.
- Coordinate with the EPA to transfer open LUST issues to RCRA Corrective Action.
- Complete monitoring well abandonments on CSX property.

Task 10 Maintain Select Surface Covers

- Install additional cover as required in the Southend of the Site.

Task 11 Lead Soil Removal

- Complete excavation work plan and coordinate/execute field work.

Task 12 Agency Coordination/Negotiation, Reporting, Project Management

- Work with USEPA to prepare 2013 Annual Environmental Action Budget Request.

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Perform Outfall 002, 003, and 005 bulkheading activities.

Task 14 Address 15 Areas of Subsurface LNAPL

- Complete construction and installation of AOI 09-B LNAPL remediation system.
- Begin startup and shakedown of AOI-9B LNAPL remediation system.

5. Estimated Percent Complete

Task 1 Outfall 003/004 Oil Removal Systems

- Outfall 003/004 Oil removal System OM&M - Ongoing

Task 2 LNAPL Investigation

- LNAPL LIF Investigations – 75%
- Outfall 003 boom study – 15%
- Natural Source Zone Depletion Study – 25%
- Transmissivity Testing –50%

Task 3 LNAPL Recovery Bench and Field-Scale Testing

- LNAPL Bench Scale Testing – 95%
- LNAPL Pilot Scale Testing – 33%

Task 7 Enhanced Groundwater Monitoring

- Groundwater Monitoring – Ongoing

Task 8 NPDES PLUS Monitoring

- NPDES PLUS Monitoring – Ongoing

Task 9 RCRA Closures, Well Abandonment, Restrictive Covenants, Resolve UST Issues

- Northend RCRA WMU Closures – 90%
- Southend RCRA WMU Closures – 90%
- Northend Restrictive Covenant – 0%

- Southend Restrictive Covenant – 90%
- Monitoring Well Abandonments – 0%
- UST Issue Resolution – 10%

Task 10 Maintain Select Surface Covers

- Maintain Select Surface Covers – Ongoing
- Installation of Additional Surface Cover – Southend – 10%

Task 11 Lead Soil Removal

- Lead Soil Removal – 10%

Task 12 Agency Coordination/Negotiation, Reporting, Project Management

- RFI Phase I Report - 100%
- RFI Phase II Report - 100%
- Human Health Exposure Control EI Report - 100%
- CA 750 Report - 100%
- Revised Corrective Measures Proposal (CMP), May 1, 2008 – 100%
- Revised CMP Addendum No. 1 – 100%
- Southend Corrective Measures Implementation (CMI) Work Plan – 100%
- Revised CMP Addendum No. 2 – Northend and Sitewide Groundwater -100%
- Revised CMP Addendum No. 2-1 – Response to EPA Comments - 100%

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Outfall 002 Evaluation - 100%
- Outfall 005 Evaluation – 85%
- Outfall 002 Final Measure Implementation– 0%
- Outfall 005 Final Measure Implementation – 0%

Task 14 Address 15 Areas of Subsurface LNAPL

- Address 15 Areas of LNAPL – 3%

- AOI 09-B System Design – 100%
- AOI 09-B Permitting – 100%
- AOI 09-B System Construction – 25%

Task 15 LNAPL Recovery OM&M Followed by Secondary LNAPL Remediation

- LNAPL Recovery OM&M – 5%
- Secondary LNAPL Remediation – 0%

If you have any questions, please call me.

Sincerely,
ARCADIS



Christopher S. Peters, P.G.
Vice President

Copies:

Peter Quackenbush, Michigan Department of Environmental Quality, (via email)
William Yocum, Michigan Department of Environmental Quality (via email)
Flint Public Library
Grant Trigger, RACER Trust (via email)
Dave Favero, RACER Trust (via email)

Attachments:

Attachment 1 – Sample Summary for April 1, 2012 to June 30, 2012

ATTACHMENT 1

REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST

BUICK CITY SITE

SAMPLE SUMMARY FOR APRIL 1, 2012 TO JUNE 30, 2012

Matrix: Storm Sewer Water (Monthly "NPDES Plus" Monitoring Program [NPMP] Sampling)				
Location ID	Field Sample ID	Date Sampled	Analyses	Date EDD Received
MH 1-3	MP001_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 2-19	MP002_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 3-3	MP003_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 5-6	MP005_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide	NAV
MH 6-2	MP006_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
Outfall 007	MP007_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 11-7	MP009_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 11-7	MP009_04092012 MS	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 11-7	MP009_04092012 MSD	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 10-5	MP010_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 13-6	MP013_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide	NAV
MH 2-19	Dup001_04092012	4/9/2012	Total Metals*, TSS, VOCs, Cyanide	NAV
Field Blank	Field_Blank_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide	NAV
Equipment Blank	Equip_Blank_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide	NAV
Trip Blank	Trip_Blank_04092012	4/9/2012	VOCs	NAV
Outfall 011	MP011_04092012	4/9/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 5-6	MP005-C_04112012	4/11/2012	PCB	NAV
Equipment Blank	ISCO_Blank_04112012	4/11/2012	PCB	NAV
MH 1-3	MP001_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 2-19	MP002_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 2-19	MP002_05102012 MS	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 2-19	MP002_05102012 MSD	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 3-3	MP003_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 5-6	MP005_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide	NAV
MH 6-2	MP006_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
Outfall 007	MP007_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 11-7	MP009_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 10-5	MP010_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 13-6	MP013_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide	NAV
MH 10-5	DUP001_05102012	5/10/2012	Total Metals*, TSS, VOCs, Cyanide	NAV
Field Blank	Field_Blank_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide	NAV
Equipment Blank	Equip_Blank_05102012	5/10/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide	NAV
Trip Blank	Trip_Blank_05102012	5/10/2012	VOCs	NAV
MH 5-6	MP005-C_05162012	5/16/2012	PCB	NAV
Equipment Blank	ISCO_Blank_05162012	5/16/2012	PCB	NAV
MH 1-3	MP001_06042012	6/4/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 2-19	MP002_06042012	6/4/2012	Low Level Total Mercury, Metals (Ag, As, Cr, Cu and Se), TSS, Cyanide	NAV
MH 3-3	MP003_06042012	6/4/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 3-3	MP003_06042012 MS	6/4/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 3-3	MP003_06042012 MSD	6/4/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide	NAV
MH 5-6	MP005_06042012	6/4/2012	Low Level Total Mercury, Metals (Ag, As, Cu, Mn, Pb, Zn), TSS	NAV
MH 6-2	MP006_06042012	6/4/2012	Low Level Total Mercury, Metals (As, Pb), TSS	NAV
Outfall 007	MP007_06042012	6/4/2012	Low Level Total Mercury, Metals (Cr, Pb), TSS	NAV
MH 3-3	Dup001_06042012	6/4/2012	Total Metals*, TSS, VOCs, Cyanide	NAV
Field Blank	Field_Blank_06042012	6/4/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide	NAV
Equipment Blank	Equip_Blank_06042012	6/4/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide	NAV
Trip Blank	Trip_Blank_06042012	6/4/2012	VOCs	NAV
MH 11-7	MP009_06042012	6/4/2012	Low Level Total Mercury, Metals (As, Cd, Cr, Cu, Mn, Pb, V, Zn), TSS, Cyanide	NAV
MH 10-5	MP010_06042012	6/4/2012	Low Level Total Mercury, Metals (As, Cd, Cr, Cu, Mn, Ni, Pb, V, Zn), TSS, Cyanide	NAV
MH 13-6	MP013_06042012	6/4/2012	Low Level Total Mercury, Metals (As, Cr, Cu, Pb, Zn), TSS, Cyanide	NAV
MH 5-6	MP005-C_06062012	6/6/2012	PCB	NAV
Equipment Blank	ISCO_Blank_06062012	6/6/2012	PCB	NAV

ATTACHMENT 1

REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST

BUICK CITY SITE

SAMPLE SUMMARY FOR APRIL 1, 2012 TO JUNE 30, 2012

Matrix: Storm Sewer (NPDES Sampling)				
Location ID	Field Sample ID	Date Sampled	Analyses	Date EDD Received
MH 3-3	Outfall003A_04052012	4/5/2012	Total PCBs	NAV
MH 3-3	MP003A_04102012	4/10/2012	Total PCBs	NAV
Equipment Blank	ISCO_Blank_04102012	4/10/2012	Total PCBs	NAV
MH 3-3	Outfall0003A_04192012	4/19/2012	Total PCBs	NAV
MH 3-3	Outfall003A_04242012	4/24/2012	Total PCBs	NAV
MH 3-3	Outfall003A_05032012	5/3/2012	Total PCBs	NAV
MH 3-3	Outfall003A_05092012	5/9/2012	Total PCBs	NAV
MH 3-3	MP003A_05152012	5/15/2012	Total PCBs	NAV
Equipment Blank	ISCO_Blank_05152012	5/15/2012	Total PCBs	NAV
MH 3-3	Outfall003A_05232012	5/23/2012	Total PCBs	NAV
MH 3-3	Outfall003A_05312012	5/31/2012	Total PCBs	NAV
MH 3-3	MP003A_06052012	6/5/2012	Total PCBs	NAV
Equipment Blank	ISCO_BLANK_06052012	6/5/2012	Total PCBs	NAV
MH 3-3	Outfall003A_06142012	6/14/2012	Total PCBs	NAV
MH 3-3	Outfall003A_06202012	6/20/2012	Total PCBs	NAV
MH 3-3	Outfall003A_06272012	6/27/2012	Total PCBs	NAV

Notes:

NAV Not Available

NA Not Applicable

* Metals analyzed for include: Ag, As, Ba, Be, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Ti, V, and Zn.

VOCs Volatile Organic Compounds

SVOCs Semi-Volatile Organic Compounds

PCBs Polychlorinated Biphenyls

TSS Total Suspended Solids

RCI Reactivity, Corrosivity, Ignitability