

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:

Quarterly Progress Report No. 3
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 Quarterly Progress Report No. 3 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 Quarterly Progress Report No. 3 covers the period of January 1, 2012 through March 31, 2012.

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

ARCADIS
10559 Citation Drive
Suite 100
Brighton
Michigan 48116
Tel 810.229.8594
Fax 810.229.8837
www.arcadis-us.com

ENVIRONMENT

Date:
April 13, 2012

Contact:
Christopher S. Peters,
P.G.

Phone:
810.225.1905

Email:
chris.peters@arcadis-us.com

Our ref:
B0064410.4012

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 Corrective Measures Implementation (CMI) Report, except as noted below.

1.1 Solid Samples

On January 23, 2012 through January 25, 2012 soil and concrete samples were collected from waste management units (WMU) #2, #7, #8, and #10 to characterize the soil. These soil samples were submitted for analysis of F-Scan VOCs, F-Scan SVOCs, 1,1,2 Trichloroethane, 1,2,2, Trichloroethane, Dichlorofluoromethane, Total Solids, and Methanol. Solid sample data for WMUs activities were included in Closure Reports, which were submitted to the MDEQ on April 2, 2012. A copy of these documents were also provided to the EPA.

On March 21, 2012 samples were collected from absorbent booms in onsite manholes 3-51 and 3-65 for characterization. These samples were submitted for analysis of total PCBs.

1.2 Storm Sewer Water Samples

In January, February, and March ARCADIS conducted the "NPDES Plus" Monitoring Program (NPMP) as described in the 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.

From January to March 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 2 *LNAPL Investigation*

- Completed evaluation of the first quarter transmissivity data.
- Completed the second quarter transmissivity testing at select monitoring wells.
- Began evaluation of the second quarter transmissivity data.
- Completed first quarter sampling event for natural source zone depletion (NSZD) investigation. Samples have been submitted for laboratory analysis.

Task 6 *Maintain Booms on Outfalls*

- Performed daily inspections of Outfalls 002, 003, 004, and 005.
- Performed inspections of Oil Interceptor #2.

Task 8 *NPDES PLUS Monitoring*

- Completed the monthly NPDES Plus Monitoring events for January, February, and March. 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).

Task 10 Maintain Select Surface Covers

- Performed the quarterly inspection of surface cover areas in March 2011.

Task 11 Lead Soil Removal

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

Task 12 Agency Coordination/Negotiation, Reporting, Project Management

- Participated in regulatory agency calls regarding the Northend Statement of Basis and the AOI 09-B MPE System Endpoints .
- Submitted RACER Quarterly Progress Report No. 2 to the EPA on January 13, 2012.

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Continued inspections of booms placed in Outfall 002 and 005.

General Regulatory Compliance Tasks

- Completed inspections and weekly NPDES sampling at MP003A. Samples collected are listed in Attachment 1.
- Performed quarterly inspections of the P-traps.

2.2 Non - Routine Work

Task 2 LNAPL Investigation

- Completed preparation of laser-induced fluorescence (LIF) investigation report which was submitted to the EPA on April 2, 2012 as part of the 2011 CMI Report.
- Completed installation of sampling ports and carbon traps for NSZD investigation.
- Continued boom study investigation along Outfall 003 storm sewer system and began evaluating options for addressing oil infiltration.
- Completed field evaluation of the Building 23 tunnel for path forward determination.

Task 3 LNAPL Recovery Bench and Field-Scale Testing

- Completed bench-scale testing and submitted the Bench-Scale Testing Report to EPA on March 9, 2012.

Task 6 Maintain Booms on Outfalls

- Evaluated oil removal options for Oil Interceptor #2.
- Performed outfall cleaning and maintenance activities; which includes pumping the outfalls and replacing the absorbent booms, as needed.
- Performed cleaning event at Oil Interceptor #2, which included changing out the absorbent booms, collecting accumulated debris, and disposal of waste.
- Reported a release to the MDEQ, City of Flint and National Response Center (NRC) from Outfalls 002, 003, 004, and 005 on March 13, 2012. The NRC report number for this release is 1005599. A representative from the City of Flint notified ARCADIS that a release was identified at the outfalls. The ARCADIS OMM technician immediately proceeded to the outfalls and no sheen was noted outside of the containment areas or in the river at that time. The release at the outfalls was thought to be caused by an increase in outfall flow rates due to recent rain events causing migration of the contained sheen to crest over the booms. In addition the river water level was recently lowered which could have resulted in the possible release of the contained sheen. An outfall maintenance event which included changing out the booms and removing accumulated debris and sheens from within the boom areas was completed on March 14, 2012.

Task 7 Enhanced Groundwater Monitoring

- Finalized reporting of the results of the 2011 annual sampling event, which were submitted to the EPA on April 2, 2012 as part of the 2011 CMI Report.

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

- Completed field sampling events at WMU #2, WMU #7, WMU #8, and WMU #10.

- Completed data evaluation and report preparation for WMU # 2, WMU #4, WMU #5, WMU #6, WMU #7, WMU #8, and WMU #10. The Northend Certification of Closure Report and the Southend Certification of Closure Reports were submitted to the MDEQ on April 2, 2012.
- Abandoned three monitoring wells (RW-4, 20-146, and 20-606) located in the former Factory 10 basement. A memo summarizing the well abandonment activities was submitted to the EPA on March 14, 2012.

Task 10 Maintain Select Surface Covers

- Began preparation of work plan to install select surface covers at the Southend of the Site.

Task 12 Agency Coordination/Negotiation, Reporting, Project Management

- Completed preparation of the draft 2011 CMI Annual Report, which was submitted to the EPA on April 2, 2012.
- Completed AOI 09-B MPE System Endpoints Memo and submitted to the EPA on February 29, 2012. On March 6, 2012 a conference call with EPA, RACER and ARCADIS was held to discuss the proposed endpoints. The EPA concurred that it would be acceptable to use an asymptotic curve to determine when to end system operations.

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Completed boom study at Outfalls 002 and 004.
- Performing a survey of Outfall 002 drainage area and evaluated surface flow.
- Evaluated data collected from Outfalls 002 and 005 and began design of corrective measures and work plan preparation.

Task 14 Address 15 Areas of Subsurface LNAPL

- Coordinated construction effort to install AOI 09-B system. Activities included: coordination with Consumers Energy for installation of gas and electrical utilities; reviewing draft air permit and providing comment to the MDEQ; coordinating with the City of Flint to have the draft sanitary sewer permit discharge permit issued; developed construction

bid documents: conducted bid walk and reviewed/evaluated bids;
completed review of treatment system shop drawings.

3. Problems Encountered

In October 2011 one of the recovery wells for the AOI 09-B system was vandalized. Based on the materials that were found around the well (wood, screws, metal caps, empty containers, etc) there are concerns about connecting this well to the AOI 09-B MPE system. If a piece of wood or a screw were pulled into the treatment system it could cause extensive damage. We have evaluated the options regarding this well and recommend using this well as an SVE well. No water would be pumped from this recovery well, thus minimizing the risk of debris being pulled into and damaging the treatment system. Prior to connecting the well to the system the well will be pumped to remove as much material as possible from the well in order to further minimize the chance of the MPE system being damaged. The recovery well will be evaluated during system startup and shakedown and can be abandoned and re-installed at a later date if deemed necessary.

Also, in January 2012, during installation of the NSZD gas sampling ports subsurface obstructions were encountered at multiple locations, thus rendering installation with the direct push equipment unproductive. The event was halted until a roto sonic drilling rig could be brought onsite to complete the installation.

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 2 LNAPL Investigation

- Continue quarterly transmissivity study and data evaluation.
- Continue quarterly NSZD study and data evaluation.

Task 6 Maintain Booms on Outfalls

- Continue daily inspections of Outfalls 002, 003, 004, and 005, and Oil Interceptor #2.

Task 8 NPDES PLUS Monitoring

- Perform NPMP monitoring in April, May, and June.

Task 10 Maintain Select Surface Covers

- Perform quarterly inspection of surface cover.

Task 11 Lead Soil Removal

- Continue to pursue access agreement with CSX to enable soil removal to occur.

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.

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

- Continue Outfall 003 boom investigation to identify sources of LNAPL infiltration into network.
- Begin planning for the 2012 LIF event.

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

- Finalize and record restrictive covenants for the Southend of the Site.
- Coordinate with MDEQ to transfer open LUST issues to RCRA Corrective Action.

Task 10 Maintain Select Surface Covers

- Select and install additional cover as required in the Southend of the Site.

Task 11 Lead Soil Removal

- Complete lead soil removal work plan and RFP and begin bidding process.

Task 13 Outfall 002/005 Oil Minimization & Investigation

- Develop work plan for final corrective measures for Outfall 002 and 005 storm sewers and begin implementation.

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 – 25%

Task 3 LNAPL Recovery Bench and Field-Scale Testing

- LNAPL Bench Scale Testing – 100%
- 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 – 95%
- Southend RCRA WMU Closures – 95%
- Northend Restrictive Covenant – 0%
- Southend Restrictive Covenant – 80%
- Monitoring Well Abandonments – 1%
- UST Issue Resolution – Pending MDEQ review and approval of transfer to RCRA Corrective Action process

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 – 5%

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 - 90%
- 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 – 85%
 - AOI 09-B System Construction – 25%

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

- LNAPL Recovery OM&M – 0%
- 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 January 1, 2012 to March 31, 2012

ATTACHMENT 1

**REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST
BUICK CITY SITE
SAMPLE SUMMARY FOR JANUARY 1, 2012 TO MARCH 31, 2012**

Matrix: Soil Samples (RCRA Soil Samples - Waste Management Units [WMU] #2, #7, #8, and #10)			
Location-ID	Field Sample ID	Date Sampled	Analyses
WMU #2	WMU2_SB1_01232012 (3'-3.5')	01/23/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #7	WMU7_SB1_01232012 (15.5-16')	01/23/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #7	WMU7_SB2_01232012 (14.5-15')	01/23/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #7	WMU7_SB3_01242012 (15.5-16')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #8	WMU8_SB1_01242012 (2-2.8')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #8	WMU8_SB2_01242012 (1.5-2')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #8	WMU8_SB3_01242012 (3.5-4')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #8	WMU8_SB4_01242012 (1.2-1.7')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #8	WMU8_SB5_01242012 (4.2-5')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB1_01242012 (17.2-17.7')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB2_01242012 (16-16.5)	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB3_01242012 (15.5-16)	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB5_01242012 (18.5-19)	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB1A_01242012 (16-16.5)	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB2C_01242012 (13-13.5')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB3C_01242012 (12.5-13')	01/24/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB4C_01242012 (14.5-15')	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB5C_01242012 (16.5-17')	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
Trip Blank	TB1_01232011	01/23/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #10	WMU10_SB4A_01252012 (17-17.5')	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
WMU #2	WMU2_SB3_01262012	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, Total Solids, Ignitability, Lead,
Trip Blank	Tripblank2_01252012	01/25/2012	VOCs
Trip Blank	Tripblank_01252012	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol F-scan SVOCs, total Solids, Ignitability, Lead
WMU #10	WMU10_SB6_01252012	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol, F-scan SVOCs, total Solids, Ignitability, Lead
WMU #10	WMU10_SB6A_01252012	01/25/2012	Fscan VOCs plus 1,1,2 Trichloro 1,2,2 Trifluoroethane and dichlorodifluoromethane, Methanol, F-scan SVOCs, total Solids, Ignitability, Lead
Matrix: Solid Samples (Absorbent Boom Samples - Manhole 3-51 and 3-65)			
Location-ID	Field Sample ID	Date Sampled	Analyses
MH 3-51	Boom 3-51	3/21/2012	Total PCB
MH 3-65	Boom 3-65	3/21/2012	Total PCB

ATTACHMENT 1

**REVITALIZING AUTO COMMUNITIES ENVIRONMENTAL RESPONSE TRUST
BUICK CITY SITE
SAMPLE SUMMARY FOR JANUARY 1, 2012 TO MARCH 31, 2012**

Matrix: Storm Sewer Water (Monthly "NPDES Plus" Monitoring Program [NPMP] Sampling)

Location-ID	Field Sample ID	Date Sampled	Analyses
MH 1-3	MP001_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 2-19	MP002_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 1-3	MP002_01032012 MS	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 2-19	MP002_01032012 MSD	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 3-3	MP003_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 5-6	MP005_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide
MH 6-2	MP006_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
Outfall 007	MP007_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 11-7	MP009_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 10-5	MP010_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 13-6	MP013_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide
MH 11-7	Dup001_01032012	01/03/2012	Total Metals*, TSS, VOCs, Cyanide
Field Blank	Field_Blank_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide
Equipment Blank	Equip_Blank_01032012	01/03/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide
Trip Blank	Trip_Blank_01032012	01/03/2012	Low Level Total Mercury, VOCs
MH 5-6	MP005-C_01062012	01/06/2012	PCB
Equipment Blank	ISCO_Blank_01062012	01/06/2012	PCB
MH 1-3	MP001_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 2-19	MP002_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 3-3	MP003_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 5-6	MP005_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide
MH 6-2	MP006_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
Outfall 007	MP007_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 11-7	MP009_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 10-5	MP010_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 10-5	MP010_02062012 MS	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 10-5	MP010_02062012 MSD	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 13-6	MP013_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide
MH 6-2	Dup001_02062012	2/6/2012	Total Metals*, TSS, VOCs, Cyanide
Field Blank	Field_Blank_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide
Equipment Blank	Equip_Blank_02062012	2/6/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide
Trip Blank	Trip_Blank_02062012	2/6/2012	Low Level Total Mercury, VOCs
MH 5-6	MP005-C_02082012	2/8/2012	PCB
Equipment Blank	ISCO_Blank_02082012	2/8/2012	PCB
MH 1-3	MP001_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 2-19	MP002_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 3-3	MP003_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 5-6	MP005_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide
MH 6-2	MP006_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
Outfall 007	MP007_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 11-7	MP009_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 11-7	MP009_03222012 MS	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 11-7	MP009_03222012 MSD	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 10-5	MP010_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, VOCs, Cyanide
MH 13-6	MP013_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, TSS, Cyanide
MH 10-5	Dup001_03222012	3/22/2012	Total Metals*, TSS, VOCs, Cyanide
Field Blank	Field_Blank_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide
Equipment Blank	Equip_Blank_03222012	3/22/2012	Low Level Total Mercury, Total Metals*, VOCs, Cyanide
Trip Blank	Trip_Blank_03222012	3/22/2012	Low Level Total Mercury, VOCs
MH 5-6	MP005-C_03282012	3/28/2012	PCB
Equipment Blank	ISCO_Blank_03282012	3/28/2012	PCB

Matrix: Storm Sewer Water (NPDES Sampling)

Location-ID	Field Sample ID	Date Sampled	Analyses
MH 3-3	MP003A_01052012	1/5/2012	Total PCBs
Equipment Blank	ISCO Blank_01052012	1/5/2012	Total PCBs
MH 3-3	Outfall003A_01112012	1/11/2012	Total PCBs
MH 3-3	Outfall003A_011912	1/19/2012	Total PCBs
MH 3-3	Outfall003A_01252012	1/25/2012	Total PCBs
MH 3-3	Outfall003A_01312012	1/31/2012	Total PCBs
MH 3-3	MP003A_02072012	2/7/2012	Total PCBs
Equipment Blank	ISCO Blank_02072012	2/7/2012	Total PCBs
MH 3-3	Outfall003A_02152012	2/15/2012	Total PCBs
MH 3-3	Outfall003A_02242012	2/24/2012	Total PCBs
MH 3-3	Outfall003A_02292012	2/29/2012	Total PCBs
MH 3-3	Outfall003A_03072012	3/7/2012	Total PCBs
MH 3-3	Outfall003A_03162012	3/16/2012	Total PCBs
MH 3-3	Outfall003A_03212012	3/21/2012	Total PCBs
MH 3-3	MP003A_03272012	3/27/2012	Total PCBs
Equipment Blank	ISCO_Blank_03272012	3/27/2012	Total PCBs

Notes:

NAV Not Available

NA Not Applicable

* Metals analyzed for include: Ag, As, Ba, Be, Cd, Co, Cr, Cu, Fe, 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

- None of the data this quarter required validation