

Side Spillway of the O'Shaughnessy Dam Scioto River Watershed

# THECTITO <br> columbủs <br> MICHAEL B. COLEMAN, MAYOR 

DEPARTMENT OF
PUBLIC UTILITIES

## City of Columbus Stormwater NPDES Permit

January 1, 2012 - December 31, 2012 (Ohio EPA Permit Numbers: 4PI00000*BD and 4PI00000*CD)

## CITY OF COLUMBUS ANNUAL REPORT

## AUTHORIZATION TO DISCHARGE UNDER THE NPDES (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM)

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq.) and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111), the City of Columbus is authorized by the Ohio Environmental Protection Agency, to discharge from all portions of the City of Columbus municipal separate storm sewer system, to waters of the State in accordance with the approved Storm Water Management Program, monitoring requirements, and other conditions specified in the permit.

January 1, 2012 through April 30, 2012: Ohio EPA Permit No. 4PI00000*BD
May 1, 2012 through December 31, 2012: Ohio EPA Permit No. 4PI00000*CD

## CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


Dax Blake, P.E.
Administrator
Division of Sewerage and Drainage

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## SECTION 1 - NARRATIVE SUMMARY

### 1.1 Annual Report Format and Content

On March 17, 2012, the Ohio EPA issued permit No. 4PI00000*CD to the City in which conditions for the City's Stormwater Management Program were defined. Permit No. 4PI00000*CD became effective on May 1, 2012 and will expire on April 30, 2017. The City continued to implement its Stormwater Management Program in accordance with Part VI.F of permit No. 4PI00000*BD through April 30, 2012. Program activities conducted from January 1, 2012 through December 31, 2012 under both permits are summarized in the following report.

### 1.2 Overview

The City of Columbus (City) owns and operates the MS4 defined as a system of conveyances and controls designed or used for the collecting, conveying, and controlling stormwater runoff. The MS4 has been constructed since the founding of the City with the primary purpose of conveying and controlling drainage from developed areas such that standing water or flooding does not result from frequent storm events. As the City has developed and regulatory requirements have changed, the MS4 has grown to consist of drainage related appurtenances including storm sewers, catch basins, curb inlets, junction chambers, manholes, culverts, headwalls and endwalls, stormwater pump stations, ditches, manmade channels, detention facilities and post-construction water quality capture facilities. The MS4 discharges to Big Walnut Creek, Alum Creek, the Olentangy River, the Scioto River, Hellbranch Run, Rocky Fork Creek, lesser named creeks, and unnamed tributaries to each.

A Table of Organization that summarizes the program elements and the responsible party for each element under the City's SWMP (Stormwater Management Program) is provided in Appendix A.

### 1.3 Description of Evaluation Process

The effectiveness of the City's stormwater management program is assessed primarily through tracking BMP implementation. The department verifies or tracks BMP implementation and determines how a management program is being implemented. It is the primary tool for developing most of the City's measurable goals.

In preparation of the Annual Report, the City compiles tracking information to provide quantitative evidence of the extent of implementation of the various program elements. Data analysis for this type of monitoring consists of an annual summary of the program data and evaluation of trends as appropriate.

### 1.4 Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

Table 1 summarizes the major findings, areas of accomplishment, areas of the stormwater program needing improvement and actions the City intends to take as part of its SWMP. More specific information about activities conducted during the 2012 reporting period is provided in Section 2.

Table 1
Summary of Major Findings, Areas of Accomplishment,
Areas Needing Improvement, and Future Direction

| Program Element | Major Findings | Areas of Accomplishment | Areas Needing Improvement | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
| Administrative | The City of Columbus annexed approximately 240 acres into City's corporation limits in 2012. | 1. The City received final permit 4PI00000*CD on March 17, 2012. 4 PI 00000 * CD became effective on May 1, 2012. <br> 2. Approximately 146 acres of land were annexed into the City of Columbus in 2011. Evaluation of these areas identified the following items for incorporation into the City's MS4 program: <br> 1. 44 Stormwater outfalls <br> 2. 1 Home septic treatment systems <br> 3. 12 postconstruction BMPs | The City is in the process of revising its Stormwater Management Plan to reflect changes in the new permit 40PI00000*CD. | Evaluation of areas annexed in 2012 for presence of additional HSTSs, stormwater outfalls, postconstruction BMPs, and industrial locations will be conducted in 2013. |
| Public Education | The City's strong | 1. The rain barrel cost | 1. In order to better | 1. We continue to build |

Table 1
Summary of Major Findings, Areas of Accomplishment,
Areas Needing Improvement, and Future Direction

| Program Element | Major Findings | Areas of Accomplishment | Areas Needing Improvement | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
|  | partnerships with local agencies, watershed groups and businesses contribute to the success of our stormwater education program. Public interest in the rain barrel cost share program was high in 2012. In order to receive a rain barrel at a reduced cost, residents had to attend a workshop in person or view an online presentation and pass a quiz to receive a voucher. This program is a successful gateway BMP and educational opportunity. | share program continues to be a successful gateway BMP and educational opportunity. The program was expanded in 2012 to include 50 rain barrels provided at no cost to residents participating in the department's Low Income Discount program. <br> 2. In partnership with the Environmental Steward's Office, the GreenSpot children's program was implemented in 2012. The program supports Columbus City Schools' First Grade curriculum. 65 classrooms at 44 different schools are | target our stormwater education message and maintain costs, DPU and other local agencies continue to collaborate, looking at the possibility of unified messaging and shared outreach/publication s. We continue to look for ways to reach populations in our community that have been underserved. <br> 2. The department is looking at various ways of coordinating the process of establishing measurable goals and evaluation methods with systems already in place or under | upon and expand partnerships, collaborate to create programs, share resources and look for funding opportunities with the common goal of improved water quality. <br> 2. This year's monthlong, communitywide Riverfest event will include a fun, educational opportunity at Jackson Pike Wastewater Treatment plant that will include a stormwater protection message. |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element | Major Findings |  |  | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
|  |  | now participating in GreenSpot Kids. Teachers received a set of books for their classroom, a program implementation guide, an in-class field trip, and other resources featuring stormwater messaging. All materials are available on the website for any teacher to access and download. <br> 3. GreenSpot, a Web based recognition program designed to educate and inspire the public on how to live greener, received commitments in 2012 from 48 businesses and 1,572 | development. |  |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element | Major Findings |  | Areas Needing Improvement | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
| \% | . | households. Commitments include water quality protection activities. <br> 4. The Central Ohio Children's Water Festival hosted 670 fifth graders in 2012. The stormwater protection message was strengthened through presentations given by Stormwater Section and other DOSD staff. . <br> 5. DPU Green Home and handout, which includes water protection and conservation tips, was on display at four Neighborhood Pride community centers. <br> 6. The department created Educational |  |  |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element | Major Findings |  | Areas Needing Improvement | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
|  |  | signage to educate visitors to the reservoirs and the Utilities Complex about the benefits of green infrastructure to remove pollutants from stormwater before it enters waterways. We now have a total of 17 signs. |  |  |
| Public Involvement | 1. Opportunities to become actively involved, particularly through the GreenSpot program and activities coordinated through our partnering agencies (CORGI, MORPC, local watershed groups, etc) have generated significant public interest. <br> 2. Active involvement is | 1. Local businesses participating in the GreenSpot program have committed to or have already taken steps that have a positive influence on reducing stormwater runoff and/or allowing more natural filtering to take place. A list of local businesses who have committed to take action to reduce |  | 1. A Community Sustainability Initiative will be created to support small businesses in becoming GreenSpot members. <br> 2. The OEPA granted the City a three year period to develop a modification to the current Wet Weather Management Plan. During this period, the community will |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element |  |  | Areas Needing Improvement |  |
| :---: | :---: | :---: | :---: | :---: |
|  | also achieved both through organization of river cleanup events (as well as promotion of those organized by volunteer agencies) and through our volunteer storm drain marking program. | stormwater runoff is provided in Appendix E. <br> 2. A Community Sustainability Initiative (CSI) was developed to support large businesses in becoming GreenSpot members. The CSI consisted of a workshop for each of the categories businesses need to commit to in order to become a GreenSpot, including the commitments to conserve and protect water. |  | be asked which they prefer as we move forward: gray or green infrastructure. This effort will involve a large campaign to educate residents on the benefits of green infrastructure as a means of controlling the quality and quantity of stormwater runoff. |
| Illicit Discharge | 1. Permit 4PI $00000^{*} \mathrm{CD}$ requires the City to work with local public health officials to: <br> - Connect existing home septic | 1. During this reporting period, the City's Division of Sewerage and Drainage (DOSD) identified 251 HSTS locations that are |  | 1. DOSD will meet with City Health Department in early 2013 to review the 251 HSTS locations that appear eligible for connection to |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element |  |  | Areas Needing Improvement |  |
| :---: | :---: | :---: | :---: | :---: |
|  | treatment systems (HSTS's) to existing sanitary sewers, where feasible, <br> - Evaluate extensions of sanitary sewers to areas currently served by HSTSs <br> 2. The City invested in upgrades to 2 handheld GPs units, and purchased a new flow meter and handheld multimeter during this reporting period to assist in dry weather and wet weather monitoring. | within 200 feet of an existing sanitary sewer and can potentially connect to central sewer service. <br> 2. All Stormwater Investigators received environmental law enforcement training from KLEMA Environmental Solutions this reporting period. |  | sanitary sewers. <br> 2. The City is drafting legislation that would defer costs associated with the connection to, and extension of, sanitary sewer systems to HSTS owners. Legislation approval by City Council is expected to occur in early 2013. <br> 3. The City is now performing dry weather field screening at all of its MS4 outfalls as. required by permit 4PI00000*CD. Permit No. 4PI00000*BD only required screening at major MS4 outfalls. |
| Construction |  |  | Network and Wi-Fi connections are inconsistent throughout | A full layer for the SWP3 Program on the City's GIS Dashboard is |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element | Major Findings | Areas of Accomplishment | Areas Needing Improvement | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | the City. The City's IT Department is working to improve full coverage. | being reviewed for implementation. The layer would include all SWP3 data relative to construction sites. |
| Post Construction |  | 130 maintenance information packets were distributed to owners/management companies that are responsible of maintaining postconstruction BMPs. |  | Review annexation data to identify WQ BMPs that may have been annexed in 2012. |
| Good Housekeeping/Pollution Prevention |  | The City submitted Notice of Intent (NOI) applications for all 6 of its facilities that require permit coverage under 40 CFR 122.26(b)(14) during this reporting period. | 1. A SWPPP for the City's ranger station in Bellpoint, Ohio must be developed. <br> 2. The City's method of handling and disposing of debris collected from street sweeping operations must be assessed. | 1. A SWPPP for the City's ranger station in Bellpoint, Ohio to be developed. <br> 2. A work instruction detailing the City's method of handling and disposing of debris collected from street sweeping operations should be developed. |
| Industrial and Related | 1. The names of | 205 No Exposure | 1. The City was | 1. Review 2012 |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element |  | Areas of Accomplishment |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Facilities | industries that have been identified and contacted by the City that have not shown proof of permit or No Exposure Certification coverage are listed in Appendix Q as Category 1 industries. <br> 2. The number of Category 1 industries increased this reporting period since 27 industries in the City's inventory have not re-applied for coverage under OEPA General Permit No. OHR000005. <br> Similarly, 130 of No Exposure Certification exemptions have expired during this reporting period. <br> 3. The City revised its | certifications and 101 industrial General Permits have been acquired to date. | advised by Ohio EPA that the City will not be able to access Ohio EPA's electronic sampling database. <br> 2. The City has been unsuccessful at acquiring copies of NOIs, General Permit confirmation numbers, and No Exposure application and confirmation letters for industries in its inventory from Ohio EPA. | annexation data to identify industries that may have been annexed. <br> 2. The City will schedule appointments with Ohio EPA throughout 2013 to retrieve copies of NOIs, General Permit confirmation numbers, and No Exposure application and confirmation letters for industries in its inventory. |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element |  | Areas of Accomplishment | Areas Needing Improvement | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
|  | industrial inspection form to conform to the requirements of the New Multi-Sector General Permit during this reporting period. |  |  |  |
| Wet Weather Monitoring |  | 1. 2012 sampling was completed at the five (5) city outfalls monitored under Permit No. 4PI00000*BD. <br> 2. Three new outfall locations were identified by the City for monitoring under Permit No. $4 \mathrm{PI} 00000^{*} \mathrm{CD}$. Outfall locations are shown on Figure 1 in Appendix B. The Ohio EPA approved monitoring at the three outfall locations on March 28, 2012. <br> 3. Wet Weather |  | Initiate collection of flow data and sampling at three new outfall locations under Permit No. 4PI00000*CD. |

Table 1
Summary of Major Findings, Areas of Accomplishment, Areas Needing Improvement, and Future Direction

| Program Element | Major Findings |  | Areas Needing Improvement | Future Direction |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Monitoring at the 5 outfalls monitored under Permit No. 4PI00000*BD ceased on December 31, 2012. <br> 4. Monitoring at the three new outfall locations will commence on January 1, 2013. |  |  |

## SECTION 2 - ASSESSMENT OF BEST MANAGEMENT PRACTICES

The SWMP includes BMPs that have been developed and implemented by various city departments and divisions in response to the requirements in Ohio EPA permits 4PI00000*BD and 4PI $00000 *$ CD. The work is coordinated by the Department of Public Utilities, Division of Sewerage and Drainage, Stormwater and Regulatory Management Section. Work is managed by the various divisions and departments including Department of Public Service, Department of Public Safety, and Department of Recreation and Parks. Based upon specific SWMP goals, responsibilities are delegated to different departments or divisions. The SWMP is an on-going effort to reduce pollutant discharges from the MS4 to the maximum extent practicable. The City of Columbus continues to work to develop and improve a comprehensive employee training program, increase public awareness, foster inter-governmental and inter-community cooperation, and promote the improvement of stormwater runoff in local watersheds.

Ohio EPA permits 4PI00000BD and 4PI00000*CD require the City to develop and report on the implementation of BMPs and measurable goals for each element of the City's SWMP. BMPs are generally described as activities, prohibitions of practices, maintenance, structural controls, and management practices and procedures used to prevent or reduce the release of pollutants or otherwise prevent adverse impacts to surface waters. The objective of stormwater BMPs is to control the quality and/or quantity of stormwater runoff to reduce the adverse impact on local receiving waters. The following tables outline the BMP and measurable goal implementation status for each program component in the SWMP. Due to changes in permit conditions under permit No. 4PI $00000^{*} \mathrm{CD}$, the City's Stormwater Management Plan is currently being revised to update descriptions of how BMPs are implemented, written procedures the City uses to address stormwater quality throughout its various program elements, rational statements, evaluation methods, and the departments responsible for BMP implementation.

PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS SWMP Component: Identify Target Pollutants

| BMP PE1-Identify Target Pollutants |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Identify at least three resid industrial/commercial issu education program is desig | ntial and three s the public ned to address. |  | 1. Residential issues identified include: pet waste, lawn care, vehicle washing and maintenance, onsite stormwater retention practices. <br> 2. Industrial/commercial issues identified include: Fats, oils and grease, vehicle washing and maintenance, building and grounds maintenance, and salvage and recycling activities. | $\checkmark$ |  |  |
| 2. Review target list during $p$ City's annual compliance EPA. | reparation of the eport to Ohio | Reviewed target audience list during annual report preparation. No additional stakeholders were added to the list this reporting period. | $\sqrt{ }$ |  |  |
| 3. Assess changes in public behavior resulting from the education program. | wareness and public | Assessment activities are being developed. |  |  | $\begin{gathered} \text { In } \\ \text { progress* } \end{gathered}$ |
| Planned Activity for Next Reporting Period: | Measurable goals will be established and evaluation methods will be determined. |  |  |  |  |
| Discussion: | *The departmen goals and evalua | is looking at various ways of coordinating the pr ion methods with systems already in place or und | ss of es develop |  | surable |

PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS SWMP Component: Develop Education Materials

| BMP PE2 - Develop and Publicize Educational Materials |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |
| Measurable Goals | Summary of Activity During Reporting Period ${ }^{1}$ : | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Reach $20 \%$ of city residents each year through distribution of educational materials. | The City reached an estimated 300,000 residents ( $27 \%$ ) through distribution of educational materials this reporting period. This is a conservative estimate, accounting simply for bill inserts (just under 300,000 per quarter) and assuming only one person per insert, while not counting additional materials such as the WALD brochure which results in a "double hit" for many ratepayers. | $\sqrt{ }$ |  |  |
| 2. Print and distribute at least 150,000 copies of the WALD brochure each year. | Distributed 163,453 brochures via home delivery, distribution sites and events. | $\sqrt{ }$ |  |  |
| 3. Develop and complete one campaign with a radio or TV station for public service announcements (PSAs) each year for at least 2 months. | Ran 30-second television PSA on GTC-3 government access cable channel (non-paid) for 12 months. | $\sqrt{ }$ |  |  |
| 4. Promote information on disconnecting downspouts and other ways to prevent sewer overflows at least once a year. | Published 595,680 bill inserts and information was also available on DPU's Web site. | $\sqrt{ }$ |  |  |
| 5. Conduct 24 Food Service Programs where restaurant employees are educated about prevention of illicit discharges during parking lot and dumpster cleaning. | 1. 51 Food Service Program training sessions were held. <br> 2. 1,218 restaurant employees attended the Food Service Program. | $\sqrt{ }$ |  |  |

[^0]
## BMP PE2 - Develop and Publicize Educational Materials

## Status:

Ongoing

| Measurable Goals |
| :--- | :--- |
| 6.Develop partnerships with local agencies to <br> promote environmental stewardship and <br> involve local environmental and educational <br> groups. |

1. In partnership with Franklin Soil and Water District and Grief, Inc., 950 households were educated on stormwater impacts and possible solutions. Each household received a rain barrel at a reduced price.
2. The city's partnership/grant with the Franklin Soil and Water Conservation District (FSWCD) continued to deliver information on the city's storm drain marking program to almost 3,000 teachers in Columbus schools. FSWCD also provided stormwater presentations reaching over 3,000 students. Additionally, 700 area students (K-8) participated in the National Association of Conservation Districtssponsored poster contest "Soil to Spoon" poster contest.
3. The City continues to be an active partner in the Central Ohio Rain Garden Initiative (CORGI). Franklin Soil Water and Conservation District leads the effort with services being provided by various agencies including Columbus. As of fall 2012, there were 115 rain gardens in Columbus, totaling 236,000 square feet that collect $17,036,250$ gallons of storm water per year. CORGI provided assistance to landowners, schools, businesses, and organizations; this includes

| Measurable Goals Achieved? |  |  |  |
| :---: | :---: | :---: | :---: |
| Yes | No | Other |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |


| BMP PE2 - Develop and Publicize Educational Materials |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |
| Measurable Goals | Summary of Activity During Reporting Period ${ }^{1}$ : | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
|  | the USGS and EPA who are monitoring several rain gardens that were installed at Griggs Reservoir in 2011. In May, Franklin Soil and Water Conservation District was awarded a little over $\$ 47,000$ from the Ohio EPA's Ohio Environmental Education Fund. The grant will help the Central Ohio Rain Garden Initiative and its member entities implement a program geared toward providing local garden centers and nurseries resources to reach out to their customers regarding rain gardens, stormwater issues, and native plants. CORGI continues to work with OSU on our NSF and OARDC grant tasks; give tours of Brook Run; participate at events; provide presentations and handouts; and maintain its website. |  |  |  |
| 7. Inspire and educate residents, businesses and non-profit/community groups on how to live greener, more sustainable lives, including tips on water quality protection, through various outreach efforts. | 1. The DPU Green Home was on display at each of the 4 Neighborhood Pride events. Information on water conservation and protection included Green Home Tips, Picture Me Green children's booklet, Indoor/Outdoor water conservation and protection brochure. Watering gauges, home water conservation kits and the We All Live Downstream brochure were also | $\checkmark$ |  |  |

[^1]
## BMP PE2 - Develop and Publicize Educational Materials

Status:
Ongoing

| Measurable Goals | Summary of Activity During Reporting Period ${ }^{1}$ : | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
|  | available to residents. <br> 2. The GreenSpot web-based program was developed to educate, inspire and recognize those trying to live greener ${ }^{2}$. <br> Outreach/publicity materials included approximately 314,000 bill inserts, two features in Franklin Soil and Water Conservation District's newsletter to teachers, distribution of postcards and the Mayor's presentation of awards to three (3) businesses who went above and beyond the requirements. GreenSpot was featured in Edible Columbus. <br> 3. The GreenSpot program expanded to include children. With funding and support from an OEEF grant and under the direction of an advisory group, a GreenSpot children's book, website and activities for families and teachers have been produced. Implementation occurred in 2012. 65 classrooms at 44 different schools are now participating in GreenSpot Kids. <br> 4. In partnership with the Health Department, two Green Walk maps were created. Both feature stormwater protection messages. The first Green Walk is of Whetstone Park, the second is a generic map that teachers |  |  |  |



PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS SWMP Component: Management of Oils and Hazardous Waste


PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS
SWMP Component: Management of Oils and Hazardous Waste

| Status: Ongoing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Print and distribute 150,000 copies of th brochure each year. | at least <br> he WALD |  | Distributed 163,453 brochures via home delivery, distribution sites and events. | $\sqrt{ }$ |  |  |
| 2. Publicize locations recyclers of househ hazardous waste, us and tires annually. | of private old ed oil, | Publicized location of HHW drop off locations and times through the Solid Waste Authority of Central Ohio (SWACO), which coordinates HHW events in Franklin County. SWACO HHW web page is: <br> http://www.swaco.org/Residents/HouseholdHazardousWaste.aspx. This page also is accessible through a link on the Division of Refuse web page within the Columbus Public Service Department http://publicservice.columbus.gov/content.aspx?id=30850 | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: | Meet or exceed measurable goals. |  |  |  |  |
| Discussion: |  |  |  |  |  |

## PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

## Required SWMP Component: Residential Lawn Program (Part III.B.3.a)

| BMP PE5 - Educate Lawn Care Businesses and General Public about Lawn Chemicals and Yard Waste |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Enhance existing programs - Ongoing <br> Implement educational program - Annually |  |  |  |  |  |
| Measurable Goals - |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Print and distribute at leas of the WALD brochure to year. | 150,000 copies households each |  | Distributed 163,453 brochures via home delivery, distribution sites and events. WALD brochure includes information relevant to proper use of fertilizers, pesticides, herbicides, other chemicals and thermometers as well as how to properly dispose of yard waste. | $\checkmark$ |  |  |
| 2. Publicize City's yard wast collection/recycling progra through the Division of Re | am offered fuse. | 1. Publicized recycling tips for homeowners through the Division of Refuse website at: http://refuse.ci.columbus.oh.us/recycle/ while highlighting/promoting the city's new curbside recycling program through our Facebook page. <br> 2. Publicized yard waste residential collection program through the Division of Refuse website at: http://publicservice.columbus.gov/yardwaste/ | $\sqrt{ }$ |  |  |
| Planned Activity for Next Meet or exceed measurable goals, <br> Reporting Period:  <br> Discussion:  |  |  |  |  |  |
|  |  |  |  |  |  |  |

PUBLIC INVOLVEMENT AND PARTICIPATION
SWMP Component: Identify Target Audience for Public Involvement Programs

## BMP PI1 - Identify and Actively Involve Target Audiences

## Status:

Ongoing, annually, must provide up to five public involvement activities by end of permit No. 4PI00000*CD

| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Re-evaluate the target aud during preparation of the | iences annually Annual Report. |  | Reviewed target audience list during annual report preparation. No changes warranted this period. | $\sqrt{ }$ |  |  |
| 2. Track number of residents in the City's stormwater p program each year. | that participated ublic participation | 1. 226 volunteers participated in 2 DPUsponsored river clean up events in June and September 2012, <br> 2. Total volunteers, estimated: 177 (estimate based on 3 volunteers per set of 15 markers; some individuals will apply a set of 15 by themselves while other sets will be applied by scout troops or classrooms under adult supervision. In 2012 the program benefited from the active participation of a resident who, through the Mayor's Columbus Volunteer Challenge, recruited dozens to apply more than 500 markers in August. Another 150 markers were applied by a student group that uses themes from the Harry Potter books to promote environmental stewardship. | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: Discussion: | Meet or exceed measurable goals. |  |  |  |  |
|  |  |  |  |  |  |  |

PUBLIC INVOLVEMENT AND PARTICIPATION SWMP Component: Public Involvement and Participation Activities

## BMP PI2 - Opportunity for Public Involvement, Storm Drain Marking Project

## Status:

Ongoing

| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Solicit 150,000 homes for the program via brochure bill inserts. | participation into istribution and/or |  | Distributed 163,453 brochures and 588,192 bill inserts. | $\sqrt{ }$ |  |  |
| 2. Distribute 300 storm drain volunteer groups per year. | markers to | Distributed 885 storm drain markers. | $\sqrt{ }$ |  |  |
| Planned Activity for'Next <br> Reporting Period: Meet or exceed measurable goals. |  |  |  |  |  |
|  |  |  |  |  |  |  |

## PUBLIC INVOLVEMENT AND PARTICIPATION

Required SWMP Component: Public Involvement and Participation Activities (Part III.C.2)

| Status: <br> Ongoing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Organize at least one strea cleanup per year. | m or river |  | Promoted 4 waterway cleanups in 4 watersheds: Olentangy, Scioto, Big Walnut and Alum Creek (3 during River Pride month and an additional one organized by the City's Watershed Management Office in the Fall). In addition, we promoted contact information for the groups Friends of the Lower Olentangy and Friends of the Scioto River, noting they would hold cleanup and invasive plant removal events through the summer months. | $\checkmark$ |  |  |
| 2. River Pride cleanups will least 150,000 Columbus h encourage public participa | be promoted to at useholds to tion. | 1. Distributed 296,964 bill inserts publicizing River Pride cleanups and volunteers were also made aware of volunteer opportunities through the 163,453 WALD brochures distributed. <br> 2. Event was also publicized on the DPU Web site and 645-STREAM line. | $\checkmark$ |  |  |
| 3. At least one news release River Pride cleanups. | will be issued on | 1 news release and three Facebook status updates were issued to publicize Central Ohio River Pride cleanups. | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: Discussion: | Meet or exceed measurable goals. |  |  |  |  |
|  |  |  |  |  |  |  |

PUBLIC INVOLVEMENT AND PARTICIPATION
Required SWMP Component: Public Involvement and Participation Activities (Part III.C.2)

## BMP PI4 - Residential Stormwater Retention

| Status: Ongoing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Publicize and provide oppo residential stormwater rete | rtunity for onsite tion activities. |  | Residents were provided opportunities to engage in stormwater retention activities via the GreenSpot rain barrel program and the Central Ohio Rain Garden Initiative. CORGI is partnering with local garden centers to educate their staff, customers and landscape designers on residential stormwater retention BMPs. Publicity includes participation in CENTS, the landscaping professional trade show, Franklin Soil and Water Conservation, CORGI and DPU websites and Facebook pages, the Utility Update bill insert. | $\checkmark$ |  |  |
| 2. Track number of rain barre the rain barrel cost share p gardens installed through network. | s sold through ogram and rain ORGI's | 1. 540 rain barrels were distributed to Columbus residents during this reporting period. <br> 2. 5 rain gardens were installed during this reporting period | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: | The CORGI grant supporting the partnership with nurseries will continue in 2013. Plant tags have been designed, designating rain garden-friendly plants. Displays will be created and educational workshops will be implemented. |  |  |  |  |
| Discussion: |  |  |  |  |  |

## PUBLIC INVOLVEMENT AND PARTICIPATION

Required SWMP Component: Public Involvement and Participation Activities (Part III.C.2)

## BMP PI5 - Pet Waste Collection Bags

## Status:

Ongoing, as needed

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Maintain 9 kiosks in city reservoir parks with pet waste bags. | 9 kiosks were maintained with pet waste bags at city reservoir parks. | $\checkmark$ |  |  |
| 2. Distribute 9,000 pet waste bags for use at city reservoir parks. | 9,000 pet waste bags were distributed at city reservoir parks. | $\checkmark$ |  |  |

Planned Activity for Next Meet or exceed measurable goals.
Reporting Period:
Discussion:

## PUBLIC INVOLVEMENT AND PARTICIPATION

## Required SWMP Component: Public Involvement and Participation Activities (Part III.C.2)

| BMP PI6 - Household Hazardous Waste (HHW) Drop Off/Collection |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. In cooperation with SWA annual HHW drop off eve | O, conduct ts each year. |  | In cooperation with SWACO, conducted 1 annual HHW drop off event. | $\checkmark$ |  |  |
| 2. Track amount of HHW col | lected per year. | Collected 137 tons of HHW. | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: | Meet or exceed measurable goals. |  |  |  |  |
|  |  |  |  |  |  |

## PUBLIC INVOLVEMENT AND PARTICIPATION

## Required SWMP Component: Public Involvement and Participation Activities (Part III.C.2)

| BMP PI7 - Watershed and Land Stewardship |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing, as needed |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Perform 400 inspections $p$ reservoir landowner prope Stewardship Program. | year of ties in the Land |  | 556 inspections of reservoir landowner properties under the Land Stewardship Program were conducted. | $\checkmark$ |  |  |
| 2. Make 250 contacts per ye information and assistanc landowners in preparing a Stewardship Agreement. | to provide to reservoir and | 435 contacts were made to contiguous neighbors regarding the maintenance of City of Columbus reservoir property and the land stewardship program. | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: Discussion: | Meet or exceed measurable goals. |  |  |  |  |
|  |  |  |  |  |  |

## PUBLIC INVOLVEMENT AND PARTICIPATION

## SWMP Component: Public Involvement and Participation Activities

## BMP PI8 - Public Hearings and Presentations

## Status:

Ongoing

| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Publish public meeting dat on the City's web site and/d subscriber notification. | s and locations or by email/mail |  | Publicized 36 public City Council meetings/hearings on City's website. ${ }^{3}$ | $\sqrt{ }$ |  |  |
| 2. Hold at least one public he where residents can comme stormwater services. This include City Council's ann stormwater, sanitary and w | aring per year nt on hearing may ual hearing on ater rates. | Conducted 6 public meetings/hearings (1 special rate hearing at City Council and 5 Sewer and Water Advisory Board meetings). | $\sqrt{ }$ |  |  |
| 3. Make available public com opportunities at City Coun | ment <br> cil meetings. | Conducted 36 regular City Council meetings. | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: <br> Discussion: | Meet or exceed measurable goals. |  |  |  |  |
|  |  |  |  |  |  |

[^2]
## PUBLIC INVOLVEMENT AND PARTICIPATION

## SWMP Component: Hotline

| BMP PI9-645-STREAM Hotline |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
|  |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Establish a hotline for resi report illicit discharges. | dents to call to |  | Made hotline available to city residents to report illicit discharges. The hotline phone number is 645 -STREAM (7873). | $\sqrt{ }$ |  |  |
| 2. Publicize hotline in at leas each year, such as the WA | one publication D brochure. | 1. Distributed 163,453 brochures, 595,680 bill inserts and 1 news release in which the hotline number was provided. <br> 2. Publicized hotline number on DPU website. <br> 3. Storm drain markers applied on inlets bear this hotline number. | $\checkmark$ |  |  |
| $\begin{array}{r}\text { Planned Activity for Next } \\ \text { Reporting Period: }\end{array}$ Meet or exceed measurable goals. <br> Discussion:  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## ILLICIT DISCHARGE

Required SWMP Component: Prohibit Non-Stormwater Discharges (Part III.D.1)

## BMP ID1 - Enact and Enforce City Code to Prohibit Non-Stormwater Discharges

Status:

| Ongoing |  | Summary of Activity During Reporting Period: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  |  | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| Review City Code at the begi five-year permit cycle, compa EPA permit regulations, and t the codes as necessary. | ning of each ing the codes to City will revise |  | Columbus City Code Chapter 1145 currently provides the legal authority to prohibit illicit discharges to the MS4 as well as spills and the dumping or disposing of materials other than stormwater into the MS4; to require compliance with conditions in ordinances, permits, contracts or orders; to inspect operators of construction sites and industrial and commercial activities and to receive and collect necessary information such as stormwater plans and operating procedures, and to effectively respond to violations. | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: <br> Discussion: | Meet or exceed measurable goals. |  |  |  |  |
|  |  |  |  |  |  |

## ILLICIT DISCHARGE

SWMP Component: Mapping

| BMP ID2 - Storm Sewer Mapping |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing, annually |  |  |  |  |  |  |
| Measurable Goals |  |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  |  | Yes | No | Other |
| 1. Annually review and update mapping of existing MS4 infrastructure and outfalls by year five of the permit. |  |  |  | 1. 44 outfalls were added to the City's inventory during this reporting period. <br> 2. New elements of the City's storm sewer system were continually added throughout the year as new development and redevelopment plans were reviewed and approved by the City. See discussion below for description of mapping update procedures. | $\checkmark$ |  |  |
| 2. Annually review and update, if necessary, the list of HSTSs that have been found to discharge to the City's MS4. |  |  | Field investigations and records research identified 90 HSTSs that discharge to the City's MS4. ${ }^{4}$ | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: |  |  |  |  |  |  |
| Discussion: |  | To enhance the City's capabilities to readily obtain MS4 network information, the City completed the conversion of its sewer atlas maps into a seamless Geographic Information System (GIS). Both sanitary and storm sewer systems are geographically referenced for GIS applications from plan information. Storm sewer information is continuously added to the GIS network as construction drawings are submitted to the City for review and approval. Elements of the GIS network will be used to expand and update the map specified under the Permit. <br> The City completed, and currently maintains, a storm sewer map that shows the location of its stormwater outfalls and private home sewerage treatment systems (HSTS) known to discharge to the City's MS4. Future MS4 outfalls are added to the map based on information provided by, the |  |  |  |  |

[^3]
## BMP ID2 - Storm Sewer Mapping

## Status:

Ongoing, annually

| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
|  | Division of Sewerage and Drainage (DOSD), Private Development Section (PDS). PDS requires applicants to submit stormwater outfall disclosure forms with their stormwater plan submittals. These forms provide planned northing and easting location information as well as information specific to the size, shape, and type of outfall that is planned for construction. Information from these forms is used to map proposed outfalls. The DPU uses existing information available in GIS format from the United States Geological Survey (USGS) to map Waters of the State that lie within or traverse the City of Columbus. <br> Review of city and county health department records reveals that the type and location of many discharging home septic systems within the city are undocumented. Given the unknown nature of these facilities, the city compiled a list of "possible" HSTS locations. The list is comprised of parcels where an inhabitable structure exists and where no sewer tap records or sewer billing account is available. Attempts to solicit information from home owners at "possible HSTS locations" were made through use of questionnaires and onsite evaluations where possible. <br> Mapping is updated by reviewing parcel annexation annually to determine if any stormwater outfalls or properties served by HSTSs exist in newly annexed areas. Conversely, sewer tap permits are reviewed throughout the year to determine what parcels, once served by a HSTS, are connected to the City's central sanitary sewer system. Once connected to the central sewer system, the HSTS address and location are removed from the "possible HSTS" inventory. |  |  |  |  |

## ILLICIT DISCHARGE

SWMP Component: Illicit Discharge Detection Program
BMP ID3 - Dry Weather Field Screening Procedures and Activities
Status:
Ongoing

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Develop and review annually for update written dry weather field screening procedures. | Written dry weather field screening procedures are included in the City's Stormwater Management Plan which is currently under revision. |  |  | In progress |
| 2. Field crews will receive annual training in dry weather field screening procedures. | Field crews attended 3 training sessions to review proper screening procedures ${ }^{5}$. | $\sqrt{ }$ |  |  |
| 3. Dry weather field screen $100 \%$ of major outfalls by end of 5 -year permit cycle. | 1. 2,644 outfalls were field screened during this reporting period ${ }^{6}$. <br> 2. 357 outfalls exhibited flow dry weather screening <br> 3. 5 instances of illicit discharges were identified through field screening activities | $\checkmark$ |  |  |

Planned Activity for Next Meet or exceed measurable goals
Reporting Period:

Discussion: | Five (5) instances of illicit discharges were identified through field screening activities? |
| :--- | :--- |

[^4]
## ILLICIT DISCHARGE

## SWMP Component: Illicit Discharge Detection Program

## BMP ID4 - Illicit Discharge Investigations

Status:
Ongoing, as needed

| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Develop, and review for up procedures that describe how trace illicit discharges and notified in the instance of discharge, spill, or illegal | date, written w to identify and who should be n illicit ump. |  | Illicit discharge investigation and reporting procedures were reviewed during this reporting period ${ }^{8}$. No changes warranted this period. |  |  | In progress |
| 2. Train investigators annually on established procedures for illicit discharge investigation, response, and notification. |  | Field crews attended 3 training sessions to review illicit discharge detection and notification procedures ${ }^{9}$. | $\checkmark$ |  |  |
| 3. Investigate each illicit disc during dry weather field sc | harge detected reening. | Five (5) illicit discharges were found during dry weather screening and all five of the illicit discharges were investigated ${ }^{10}$. | $\checkmark$ |  |  |
| 4. Respond, when notified, to a spill, illegal dumping, sa failing HSTS discharge, or per the established procedu | each instance of nitary discharge, industrial release res. | 1. Received 51 reports of illicit discharge from general public.* <br> 2. Responded to 51 reports of illicit discharge as reported by the general public ${ }^{11}$. | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: | Meet or exceed measurable goals |  |  |  |  |
| Discussion: | *Of the 51 reports of illicit discharges received, 42 reports resulted in the identification of an illicit discharge. |  |  |  |  |

[^5]
## ILLICIT DISCHARGE

Required SWMP Component: Illicit Discharge Elimination Program (Part III.D.5)

| BMP ID5-Illicit Discharge Tracking and Elimination |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing, as needed |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Enter results of illicit discharge investigations into tracking database for each illicit discharge investigated. |  |  | Responded to 51 reports of illicit discharge as reported by the general public and added 51 reports of illicit discharge to the City's tracking database. | $\sqrt{ }$ |  |  |
| 2. Close out/document elimination of illicit discharges in tracking database. |  | 47 instances of illicit discharge were closed out documenting that the illicit discharge was eliminated.* | $\checkmark$ |  |  |
| 3. Review annually for update an enforcement action schedule that documents enforcement actions the City will take to eliminate illicit discharges into the City's MS4. |  | The enforcement action schedule is included in the City's Stormwater Management Plan which is currently under revision. |  |  | In progress |
| 4. Apply appropriate enforcement actions to eliminate each identified illicit discharge ${ }^{12}$. |  | 1. 20 Notices of Violation were issued. <br> 2. $\$ 3,750$ in Administrative Fines was assessed. <br> 3. 13 illicit discharges were referred to other agencies for enforcement/elimination. | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: | Meet or exceed measurable goals |  |  |  |  |
| Discussion: | *One report of illicit discharge investigated was not closed out at the end of this reporting period. A main water leak needs to be fixed by the City Water Department before the City can perform dye testing to determine if there is an illicit connection to the MS4. Close-out of this discharge is anticipated to occur during 2013 once the water main is fixed. <br> The City Health Department is working with the owners of 3 improperly functioning home septic treatment systems to repair the malfunctioning systems. |  |  |  |  |

[^6]| BMP ID5-Illicit Discharge Tracking and Elimination |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing, as needed |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
|  | One (1) illicit connection was disconnected from the City's storm sewer system along the north side of Windsor Avenue west of Joyce Avenue during this reporting period. The connection was one of two illicit connections identified during an ongoing investigation by the City and Ohio EPA into high zinc concentrations found in the City's MS4 and in American Ditch in this area. Disconnection of the second tap is pending approval of funds for future investigations of the property located north of Windsor Avenue. The property, formerly owned by ASARCO, was once used as a zinc smelting facility. |  |  |  |  |

CONSTRUCTION
SWMP Component: Construction Program
BMP CP1 - Construction Site Pollution Prevention Regulation
Status:
Ongoing

| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| Annually review, and revise as needed, the Erosion and Sediment Pollution Control Regulation. |  |  | City's Erosion and Sediment Control regulation was reviewed internally. It was determined that the regulation was consistent with Ohio EPA's current Construction General Permit and that changes to the regulation were not warranted at this time. | $\sqrt{ }$ |  |  |
| Planned Activity for Next <br> Reporting Period: Meet or exceed measurable goals. |  |  |  |  |  |
|  |  |  |  |  |  |  |

## CONSTRUCTION

SWMP Component: Construction Program

## BMP CP2 - Construction Site Pollution Prevention Plan Review and Approval Process

## Status:

| Ongoing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| The City will review and comment on all submitted construction site pollution prevention plans ${ }^{13}$. | 1. 212 construction site pollution prevention plans were submitted to the City for review/approval. <br> 2. 212 construction site pollution prevention plans were reviewed and approved. | $\sqrt{ }$ |  |  |

Planned Activity for Next Meet or exceed measurable goals
Reporting Period:
Discussion:

[^7]
## CONSTRUCTION

SWMP Component: Construction Program

## BMP CP3 - Construction Site Inspection

Status:
Ongoing, annually

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Review annually for update, written procedures that describe how construction inspections are prioritized and performed. | Written construction inspection procedures are presented in the City's Stormwater Management Plan which is currently under revision. |  | . | In progress |
| 2. Train inspectors annually on established procedures for construction site inspection. | Construction inspectors attended the Central 2012 Ohio Stormwater and Erosion Control Expo and participated in other training opportunities ${ }^{14}$. | $\checkmark$ |  |  |
| 3. Perform 8 construction inspections per year per construction site. ${ }^{15}$ | 1. 4,583 construction site inspections were performed. <br> 2. Responded to 64 various storm/SWPPP related reports from the general public. <br> 3. The average number of active construction site inspections per month was 382 . | $\checkmark$ |  |  |
| 4. Perform a follow-up inspection within ten (10) days from the date a Construction Inspection Report or formal Request for Voluntary Compliance is issued. | There were 116 construction sites in noncompliant status; 98 were resolved within 10 days. 18 were issued NOV's. Additionally, 7 of the 18 sites were assessed Administrative Fines totaling $\$ 4,500$. | $\checkmark$ |  |  |
| 5. Maintain $85 \%$ of construction sites in compliance with the City's Construction Site Pollution Prevention Regulations. | $97 \%$ of construction sites inspected were in compliance. | $\checkmark$ |  |  |
| Planned Activity for Next ${ }^{\text {Meet or exceed measurable goals }}$ |  |  |  |  |

[^8]| BMP CP3 - Construction Site Inspection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing, annually |  |  |  |  |
| Measurable Goal | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| Reporting Period: |  |  |  |  |
|  |  |  |  |  |  |

## CONSTRUCTION

SWMP Component: Construction Program

## BMP CP4 - Tracking and Enforcement

| Status: Ongoing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Update site tracking sprea new and active constructio inspection dates, recomm priority, and compliance $h$ inspection. | dsheet to include n sites and add nded actions, istory for each |  | 1. 212 construction sites were added to the City's construction site inventory this reporting period. <br> 2. The total number of number of new construction sites inventoried as of the end of this reporting period is 212 . <br> 3. Added 4,583 inspection results into the City's tracking spreadsheet. | $\checkmark$ |  |  |
| 2. Develop and review annu enforcement action sched enforcement actions the C ensure construction site co City's Construction Site P Prevention Regulations. | lly for update an le that documents ty will take to mpliance with the ollution | The enforcement action schedule is included in the City's Stormwater Management Plan which is currently under revision. |  |  | $\underset{\text { progress }}{\text { In }}$ |
| 3. Apply appropriate enforce achieve compliance with Construction Site Pollutio Regulation ${ }^{16}$. | ment actions to City's Prevention | 1. 18 Notices of Violation were issued. <br> 2. 7 Administrative Fines were assessed. | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: <br> Discussion: | Meet or exceed measurable goals |  |  |  |  |
|  |  |  |  |  |  |

[^9]
## POST CONSTRUCTION

## SWMP Component: Post Construction Regulations

| BMP PC1 - Post-Construction BMP Requirements |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing, annually, as needed |  |  |  |  |  |
|  |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Develop and implement regulations requiring use of post-construction runoff controls on new development and redevelopment sites. |  |  | The City's Stormwater Drainage Manual requires implementation of post construction BMPs on new and redevelopment sites. Updates to the Stormwater Drainage Manual were completed in August 2012. | $\sqrt{ }$ |  |  |
| 2. Review the City's Stormwa Manual (SWDM) annually necessary, to reflect accept practices in stormwater ma stormwater regulation. | ter Drainage and revise, if d standard nagement and | 1. Revisions to SWDM were initiated in 2007 and were completed in August 2012. The City formed the SWDM Review Team in September 2011 that included representatives from developers, engineers, the BIA, and environmental groups to assist with SWDM revisions. <br> 2. A financial incentive to encourage the implementation of green infrastructure was incorporated into the City's stormwater credit regulations in August 2012. | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: | Meet or exceed measurable goals |  |  |  |  |
| Discussion: | *The SWDM Review Team is tasked with revising the City's drainage policies with respect to variance request, implementation of green infrastructure, clarification of stream definition, and minimum disturbance threshold for flood control mitigation. |  |  |  |  |

## POST CONSTRUCTION

SWMP Component: Post Construction Planning Documents

| BMP PC2 - Post Construction BMP Planning and Guidance Document |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Complete, as needed |  |  |  |  |  |
|  |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Develop and implement pl document targeted at contro construction pollutants for redevelopment. | anning guidance olling post new and |  | The City's Stormwater Drainage Manual requires implementation of post construction BMPs on new and redevelopment sites. Updates to the Stormwater Drainage Manual were completed in August 2012. | $\checkmark$ |  |  |
| 2. Review post construction and revise, if necessary, to standard practices in storm management and stormwa | guidance annually reflect accepted water er regulation. | Revisions to SWDM were initiated in 2007 and were completed in August 2012. The City formed the SWDM Review Team in September 2011 that included representatives from developers, engineers, the BIA, and environmental groups to assist with SWDM revisions. | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: <br> Discussion: | Meet or exceed measurable goals |  |  |  |  |
|  |  |  |  |  |  |  |

## POST CONSTRUCTION

SWMP Component: Post Construction Planning Documents

| Status: Ongoing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| Review construction plans for development or redevelopmen disturb greater than or equal to including projects less than on part of a larger common plan to ensure implementation post stormwater BMPs as required | all new projects that one acre, acre that are f development, construction by the SWDM. |  | 1. 107 new development and redevelopment plans were submitted to and reviewed by the City ${ }^{17}$. <br> 2. 49 new development and redevelopment plans were required to have post construction BMPs. <br> 3. The design of 86 proposed structural post construction BMPs were found compliant with Ohio EPA's Construction General Permit. <br> 4. As of the end of this reporting period, postconstruction maintenance requirements are in place for 239 new development and redevelopment sites. | $\checkmark$ |  |  |
| Planned Activity for Next Meet or exceed measurable goal <br> Reporting Period:  <br> Discussion:  |  |  |  |  |  |
|  |  |  |  |  |  |  |

[^10]
## POST CONSTRUCTION

SWMP Component: Long Term Operation and Maintenance of BMPs

| BMP PC4 - BMP Maintenance Requirements and Inspection |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
|  |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Adopt regulations that req owners to properly operate post construction BMPs. | uire property and maintain $\qquad$ |  | The City's Stormwater Drainage Manual requires property owners to operate and maintain post construction BMPs. | $\sqrt{ }$ |  |  |
| 2. Conduct inspections of 20 construction BMPs each y | percent of Postar. | 1. 337 post-construction BMPs have been constructed to date. <br> 2. Inspected 78 post-construction BMPs for proper maintenance and operation during this reporting period ${ }^{18}$. <br> 3. 31 meetings were held with a BMP owner to review BMP maintenance plans and requirements. | $\sqrt{ }$ |  |  |
| Planned Activity for Next  <br> Reporting Period: Meet or exceed measurable goal <br> Discussion:  |  |  |  |  |  |
|  |  |  |  |  |  |  |

[^11]
## POST CONSTRUCTION

## SWMP Component: Long Term Operation and Maintenance of BMPs

| Status: Ongoing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Develop and update post database monthly to includ are planned and constructe development and redevelo | nstruction BMP new BMPs that as part of new ment projects. |  | 1. 86 (planned) new water quality post construction BMPs were added to the BMP database. <br> 2. The total number of sites responsible for maintaining post-construction BMPs as of the end of this reporting period is 239. | $\checkmark$ |  |  |
| 2. Enter results of post constr inspections into tracking d BMP inspected. | ution BMP tabase for each | The post-construction BMP database was updated to include inspection reports for 78 post construction BMPs inspected. | $\sqrt{ }$ |  |  |
| 3. Develop and review annua enforcement action schedul enforcement actions the C ensure BMPs are being ma | ly for update an e that documents y will take to intained. | The enforcement action schedule is included in the City's Stormwater Management Plan which is currently under revision. |  |  | In progress |
| 4. Apply appropriate enforce ensure post construction B compliance. | nent actions to MP maintenance | 130 inspection reports were sent to BMP owners this reporting period. | $\sqrt{ }$ |  |  |
| Planned Activity for Next <br> Reporting Period: Meet or exceed measurable goal <br> Discussion:  |  |  |  |  |  |
|  |  |  |  |  |  |  |

## POLLUTION PREVENTION/GOOD HOUSEKEEPING

## Required SWMP Component: List of Municipal Operations (Part III.G.1)

| Stormwater Pollution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |
| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| Review and update City's O\&M inventory annually. | Total number of City O\&M facilities currently stands at $82^{19}$. | $\checkmark$ |  |  |

Planned Activity for Next $\quad$ Meet or exceed measurable goal

[^12]
## POLLUTION PREVENTION/GOOD HOUSEKEEPING

Required SWMP Component: Pollution Prevention Procedures (Part III.G.3, III.G.4, and III.G.6)

## BMP GH2 - Develop and Implement Pollution Prevention Practices for City Facilities/Activities

## Status: <br> Complete, ongoing

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Submit Notices of Intent and prepare Stormwater Pollution Prevention Plans (SWPPPs) or submit No Exposure Applications to OEPA for Tier I city facilities ${ }^{20}$ that require coverage under OEPA's Industrial Stormwater Permit Program. | General permit confirmation letters were issued to six (6) city-operated facilities by Ohio EPA during this reporting period ${ }^{21}$. | $\checkmark$ |  |  |
| 2. Incorporate written P 2 practices into SWPPPs for Tier II city facilities ${ }^{22}$. | 1. SWPPPs have been prepared for 78* facilities as of the end of this reporting period. <br> 2. The City's Fleet Management Division equipped 51 of the City's refueling facilities with spill kits during this reporting period. |  |  | $\underset{\text { in }}{\text { progress* }}$ |

Planned Activity for Next Meet or exceed measurable goals
Reporting Period:
Discussion: *A SWPPP for the City's ranger station in Bellpoint, Ohio has not yet been developed.

[^13]
## POLLUTION PREVENTION/GOOD HOUSEKEEPING

## Required SWMP Component: Pollution Prevention Procedures (Part III.G.3, III.G.4, and III.G.6)

## BMP GH3 - Street Cleaning

## Status:

Ongoing

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Continue to incorporate high efficiency sweepers into the City's street sweeping inventory. | One street sweeper was purchased during this reporting period. ${ }^{23}$ The street sweeper that was purchased was a compressed natural gas model and is not PM-10 compliant. |  | $\sqrt{*}$ |  |
| 2. Sweep 10,000 curb miles of city streets each year, weather pending. | 29,812 miles of streets were swept. | $\sqrt{ }$ |  |  |
| 3. Collect and dispose of up to 2,000 tons of debris and litter from street sweeping and roadside litter pick up each year. | 3,908 tons of debris and litter were collected and disposed. | $\sqrt{ }$ |  |  |

## Planned Activity for Next <br> Reporting Period:

Discussion:
*Correction to 2011 MS4Annual Report: The 2011 annual report stated that 23 new high efficiency street sweepers were purchased during the 2011 reporting period. During preparation of the 2012 annual report it was determined that of the 23 street sweepers purchase in 2011, eight (8) were high efficiency sweepers. The City defines "high efficiently sweepers" as sweepers that are manufactured to meet PM-10 standards as defined by Rule 1186 of the South Coast Air Quality Management District in southern California.

[^14]
## POLLUTION PREVENTION/GOOD HOUSEKEEPING

Required SWMP Component: Pollution Prevention Procedures (Part III.G.3, III.G.4, and III.G.6)

| BMP GH4 - Deicing and Snow Removal |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Continue to store all deicin stockpiles under roof or ot prevent materials from ent runoff. | g material herwise to ring stormwater |  | City stored all deicing materials in 6 salt barns. | $\sqrt{ }$ |  |  |
| 2. Annually calibrate salt spre the minimum amount of $m$ safety. | aders to meter aterial for public | All 66 trucks used for deicing operations and snow removal were calibrated for minimum salt application. | $\sqrt{ }$ |  |  |
| 3. Provide training annually performing deicing operati the established BMP proce followed and the minimum deicing materials are appli pubic safety. | o city staff ons to ensure that dures are amount of d to ensure | 200 city employees were trained on proper salt application techniques at City's Snow Warriors training session. | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: <br> Discussion: | Meet or exceed measurable goal |  |  |  |  |
|  |  |  |  |  |  |

POLLUTION PREVENTION/GOOD HOUSEKEEPING
Required SWMP Component: Pollution Prevention Procedures (Part III.G.3, III.G.4, and III.G.6)

| BMP GH5-Refuse Collection |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Collect and dispose of ref 327,000 households week | se from over |  | 320,866 tons of refuse and recyclables from city residents was collected and disposed of through the City's curbside refuse and recycling collection programs. | $\checkmark$ |  |  |
| 2. Coordinate at least one nei collection campaign per y | ghborhood refuse ar. | 1. 438 neighborhood litter cleanups were conducted. <br> 2. 316,875 pounds of refuse was collected and disposed. | $\checkmark$ |  |  |
| 3. Collect yard waste from o single-family residential h week. | er 225,000 useholds each | 31,719 tons of yard waste from city residents was collected and composted. | $V$ |  |  |
| Planned Activity for Next Reporting Period: <br> Discussion: | Meet or exceed measurable goal |  |  |  |  |
|  |  |  |  |  |  |

## POLLUTION PREVENTION/GOOD HOUSEKEEPING

Required SWMP Component: Stormwater Facility Maintenance (Part III.G.7)

## BMP GH6 - Stormwater Infrastructure Inspection, Tracking, and Maintenance

Status:

| Ongoing $\quad$ Measurable Goals | Summary of Activity During Reporting Period: |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Inspect 10,000 catch basins/inlets annually for cleaning. | 1. 30,597 catch basins/inlets were inspected <br> 2. 4,605 catch basins/inlets were cleaned | $\sqrt{ }$ |  |  |
| 2. Televise 15,000 lineal feet storm sewer annually. | 23,601 lineal feet of storm sewers were televised. | $\checkmark$ |  |  |
| 3. Clean 50,000 feet of storm sewer pipe per year. | 94,702 feet of storm sewer pipe was cleaned. | $\sqrt{ }$ |  |  |
| 4. Inspect all 15 stormwater pump stations at least once quarterly. | 1. Each pump station was inspected 42 times during the reporting period. <br> 2. Four (4) stormwater pump stations were cleaned this reporting period. | $\sqrt{ }$ |  |  |
| 5. Inspect, clean, mow, or otherwise maintain all 27 DOSD stormwater detention/retention basins at least once annually, | All 27 stormwater detention/retention basins are being maintained. Preventative maintenance routes for trash rack and/or sluice gate maintenance/inspection have been established. Mowing contract also in place. | $\sqrt{ }$ |  |  |
| 6. Inspect/clean all 65 DOSD maintained trash racks at least twice annually. | 217 trash rack inspections were conducted. 278 trash racks cleanings were performed. | $\sqrt{ }$ |  |  |
| 7. Clean 30,000 lineal feet of drainage ditches annually. | 31,393 feet of drainage ditches were cleaned. | $\checkmark$ |  |  |
| 8. Maintain and update a database to track regular stormwater facility inspection and maintenance. | 1. Sewer Maintenance Operations (SMOC) used the Oracle Utilities Work and Asset Management application to track maintenance and inspection activities | $\checkmark$ |  |  |


| BMP GH6 - Stormwater Infrastructure Inspection, Tracking, and Maintenance |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
|  |  |  | involving the collection system. <br> 2. The City tracked the completion of over 10,974 storm, sanitary, and combined collection system maintenance activities in the Oracle application. |  |  |  |
| 9. Prepare written pollution practices for stormwater maintenance activities. | revention (P2) stem | Written P2 practices, originally developed in July, 2007, are currently under revision for incorporation into the SWPPP for the City's Sewer Maintenance Operations facility. |  |  | $\underset{\text { progress }}{\text { In }}$ |
| Planned Activity for Next Reporting Period: Discussion: | Meet or exceed measurable goal |  |  |  |  |
|  |  |  |  |  |  |

## POLLUTION PREVENTION/GOOD HOUSEKEEPING

## Required SWMP Component: Training and Education (Part III.G.5)

## BMP GH7 - Employee Stormwater Pollution Awareness Training

Status:
Ongoing

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. All new city employees undergoing orientation will be informed of the need and phone number to report illicit discharges. | 273 new city employees were presented with information on illicit discharge identification and reporting. | $\checkmark$ |  |  |
| 2. City employees that conduct activities at city Tier I and Tier II sites will be trained on elements of their respective stormwater pollution prevention plans annually ${ }^{24}$. | 1. 287 employees were trained at Tier I facilities. <br> 2. 826 employees were trained at Tier II facilities. | $\sqrt{ }$ |  |  |

Planned Activity for Next Meet or exceed measurable goals
Reporting Period:
Discussion:

[^15]
## INDUSTRIAL AND RELATED FACILITIES

Required SWMP Component: Inventory of Industrial Facilities (Part III.H.1)

| BMP IF1 - Prepare Inventory of Industrial Facilities |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| Update the City's industrial in based on: <br> a. NOIs submitted as par Management Plans, <br> b. New industries identif Daily Reporter publica <br> c. Industries identified th illicit discharge and de investigations <br> d. New industries identif Industrial Waste Pretr and <br> e. Review of lists of pern qualifying industries m Ohio EPA. | ventory annually of Stormwater <br> ed within the tion, ough recent ection <br> ed under the atment Group, <br> itted/no exposure aintained by |  | Inventory updated this period. Current total number of industrial sites in the City's inventory is 862 . | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: Discussion: | Meet or exceed measurable goals |  |  |  |  |
|  |  |  |  |  |  |

## INDUSTRIAL AND RELATED FACILITIES

Required SWMP Component: Industrial Facility Inspection Schedule, Form, and Monitoring Data Acquisition (Part III.H. 2 and III.H.5)

## BMP IF2 - Acquisition, Review, and Tracking of Permit Information, Stormwater Pollution Prevention Plans, and Industrial Monitoring Data

## Status:

Ongoing

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| 1. Contact Ohio EPA and new industries as they are identified to request: <br> a. OEPA NPDES permit numbers or Notices of Intent forms, <br> b. OEPA No Exposure Certification numbers, <br> c. Stormwater Pollution Prevention Plans (SWPPPs) | 1. In response to contacts made by the city to date, the City has the following documents actively on file: <br> a. 19 Notices of Intent and 5 OEPA NPDES permit numbers <br> b. 129 No Exposure Certifications <br> c. 105 SWPPPs, 28 SPCC plans, and 10 integrated plans <br> 2. Monitoring data for 18 industries was received this reporting period <br> 3. Procured copy of list of industrial permit holders from Ohio EPA; incorporated data into the industry list. | $\sqrt{ }$ |  |  |
| 2. Identify Category 1 and Category 2 industries by May $31,2008 .{ }^{25}$ | 1. 556 Category 1 industries have been identified ${ }^{26}$. <br> 2. 306 Category 2 industries have been identified ${ }^{27}$. | $\sqrt{ }$ |  |  |

[^16]| BMP IF2 - Acquisition, Review, and Tracking of Permit Information, Stormwater Pollution Prevention Plans, and Industrial Monitoring Data |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 3. Maintain a hard copy file monitoring data it received Category 2 industrial facil | or SWPPPs and for each ty. |  | Hard copy files are available and located at the City's Division of Sewerage and Drainage, 1250 Fairwood Ave., Columbus, Ohio. | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: | 1. Meet or exceed measurable goals <br> 2. Follow-up with Ohio to acquire NOI's, General Permit confirmation numbers, and No Exposure application and certification letters. <br> 3. Follow-up with Ohio to acquire monitoring data for category 2 industries. |  |  |  |  |
| Discussion: |  |  |  |  |  |

## INDUSTRIAL AND RELATED FACILITIES

Required SWMP Component: Industrial Facility Inspection Schedule and Form (Part III.H.2)

## BMP IF3 - Establish Industrial Facility Inspection Schedule

## Status:

Complete, revise as needed

| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Other |
| Re-evaluate and prioritize the Category 2 industries for inspections annually. Industries will be prioritized for inspection based on their potential to generate illicit discharges. | 1. 110 Category 2 industries have been prioritized based on a "High" rating of illicit discharge potential ${ }^{28}$. <br> 2. 58 Category 2 industries have been prioritized based on a "Medium" rating of illicit discharge potential. <br> 3. 109 Category 2 industries have been prioritized based on a "Low" rating of illicit discharge potential. <br> 4. 29 category 2 industries could not be prioritized since SIC numbers are known. | $\checkmark$ |  |  |

Planned Activity for Next 1 1. Meet or exceed measurable goals
Reporting Period: 2. Follow-up with Ohio EPA to retrieve unknown SIC numbers.
Discussion:

[^17]
## INDUSTRIAL AND RELATED FACILITIES

Required SWMP Component: Industrial Facility Inspection Schedule and Form (Part III.H.2)

| Status: <br> Complete, revise as needed |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Sum | easur | Goal | hieved? |
|  |  |  | Yes | No | Other |
| Review annually for update, the Industrial Site Inspection form | Stormwater | The Stormwate was revised in requirements in | $\checkmark$ |  |  |
| Planned Activity for Next Reporting Period: | Meet or exceed measurable goals |  |  |  |  |
| Discussion: |  |  |  |  |  |

## INDUSTRIAL AND RELATED FACILITIES

Required SWMP Component: Industrial Facility Inspections (Part III.H. 3 and III.H.4)

| BMP IF5-Staff Training |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |
| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| Implement routine training programs for employees that perform industrial site inspections. | One industrial inspector participated in 2 two (2) training opportunities related to industrial activities this reporting period. | $\checkmark$ |  |  | inspections. activities this reporting period.

Planned Activity for Next Meet or exceed measurable goals Reporting Period:

Discussion:

## INDUSTRIAL AND RELATED FACILITIES

## Required SWMP Component: Industrial Facility Inspections (Part III.H.3 and III.H.4)

| BMP IF6 - Industrial Facility Inspections |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: <br> Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Develop, and review annu written procedures that de industrial inspections are p | lly for update, cribe how erformed. |  | Written industrial inspection procedures are presented in the City's Stormwater Management Plan which is currently under revision. |  |  | In progress |
| 2. Inspect $100 \%$ of inventori industrial facilities at least City's MS4 permit term. | Category 2 once within the | 1. 61 inspections were conducted at Category 2 industrial facilities ${ }^{29}$. <br> 2. 9 inspections were conducted at Category 1 industrial facilities ${ }^{30}$. | $\sqrt{ }$ |  |  |
| Planned Activity for Next Reporting Period: | Meet or exceed measurable goals |  |  |  |  |
|  |  |  |  |  |  |

[^18]INDUSTRIAL AND RELATED FACILITIES
Required SWMP Component: Industrial Facility Inspections (Part III.H. 3 and III.H.4)

| Status: Ongoing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Measurable Goals | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Enter results of industrial inspections into tracking databases for each industry inspected. | Inspection information for 70 industrial inspections were added to the City's tracking database. | $\checkmark$ |  |  |
| 2. Review annually for update response actions the City will take to eliminate pollution potential problems identified at industrial sites. | 1. Per Part III.F of Permit No. 4PI00000*CD, the City is required to report, in writing, any observed violation of Ohio EPA's Industrial Stormwater Permit to Ohio EPA. <br> 2. Illicit discharges to the MS4 that are observed during industrial inspections are immediately reported to the City's Illicit Discharge and Detection Group for containment, investigation and enforcement action. Illicit discharges to waters of the State that are observed during industrial inspections are immediately reported to the City's Illicit Discharge and Detection Group for containment and to Ohio EPA for investigation and enforcement action. <br> 3. The response procedures listed under Item 1 and Item 2 were reviewed during this reporting period. No further action required. | $\checkmark$ |  |  |
| 3. Respond, when notified, to each instance of an industrial release per or violation of Ohio EPA's industrial stormwater permit per established procedures. | 1. 70 inspection reports were issued to industry operators during this reporting period. <br> 2. No instance of illicit discharge to the MS4 | $\checkmark$ |  |  |


| BMP IF7- Industrial Facility Inspection Tracking and Enforcement |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Status: Ongoing |  |  |  |  |  |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
|  |  |  | was observed during industrial inspections this reporting period. |  |  |  |
| Planned Activity for Next <br> Reporting Period: Meet or exceed measurable goals |  |  |  |  |  |
|  |  |  |  |  |  |  |

## INDUSTRIAL AND RELATED FACILITIES

Required SWMP Component: Monitoring Industrial Sites (Part III.H.6)

| Status: <br> Ongoing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measurable Goals |  | Summary of Activity During Reporting Period: | Measurable Goals Achieved? |  |  |
|  |  | Yes | No | Other |
| 1. Review annually for updat procedures that identify co concern and when industri required to monitor storm | , written stituents of 1 facilities are ater discharges. |  | Written procedures to outline industrial monitoring strategies are presented in the City's Stormwater Management Plan which is currently under revision. |  |  | In progress |
| 2. Review and file stormwate sampling reports submitte operators. | monitoring and by industrial | Monitoring reports from 18 Category 2 industries were reviewed by the City. | $\sqrt{ }$ |  |  |
| Planned Activity for Next <br> Reporting Period: Meet or exceed measurable goals | Meet or exceed measurable goals |  |  |  |  |
| Discussion: |  |  |  |  |  |

## SECTION 3 - SUMMARY AND ANALYSIS OF COLLECTED INFORMATION

Information provided in this section was generated by the wet weather and dry weather outfall monitoring programs that were conducted from January 1, 2012 to December 31, 2012. A summary of activities and findings associated with development and implementation of the citywide wet weather monitoring program is provided in Section 3.1. A summary and elimination status for illicit discharges detected under the City's dry weather outfall monitoring program is summarized in Section 3.2.

### 3.1 Summary of City-Wide Wet Weather Monitoring Activities

The goal of the City's wet weather sampling program was to collect samples at five (5) locations throughout the City of Columbus during each quarter of 2012. The five (5) locations selected for sampling were manholes and outfalls that are located downstream of representative land uses, such as residential, mixed residential (single family and multi-family), commercial and industrial. Analysis of the samples obtained from all five (5) locations was performed by Pace Analytical, Inc. and the Columbus Surveillance Laboratory. A full report on the City's wet weather monitoring activities and finding this reporting period can be found in city-wide monitoring report located in Appendix S.

Permit 4PI00000*BD under which wet weather sampling was performed from 2007 through 2011 expired on May 31, 2011. Throughout the later part of 2011 and into early 2012 the City negotiated new permit terms, including wet weather sampling requirements for the next permit cycle, with Ohio EPA. During negotiations it was necessary for the City to modify its existing contract with Stantec, Inc. to continue monitoring the five outfall locations until wet weather monitoring requirements under the new permit ( $4 \mathrm{PI} 00000^{*} \mathrm{CD}$ ) were known. The contract modification process was not completed until the second quarter of 2012. As a result, no monitoring was completed during the first quarter of 2012. Samples from three (3) storm events at all five (5) monitoring locations were collected and analyzed by Stantec and city laboratories for the following parameters:

## Pace Analytical, Inc. parameters

- Fecal coliform (\#/100 ml)
- E. coli (\#/100 ml)
- Nitrite (NO2) (mg/l)
- Carbonaceous biochemical oxygen demand (CBOD5) (mg/l)
- Biochemical oxygen demand (BOD5) (mg/l)
- Chemical oxygen demand (COD) (mg/l)
- Orthophosphate (mg/l)


## The Columbus Surveillance Laboratory parameters

- Total suspended solids (TSS) (mg/l)
- Total phosphorus (mg/l)
- Ammonia (NH3) (mg/l)
- Alkalinity (mg/l)
- Oil \& grease (mg/l)
- Total cyanide ( $\mu \mathrm{g} / \mathrm{I}$ )
- Hardness ( $\mathrm{mg} / \mathrm{l}$ )
- Total recoverable cadmium (Cd) ( $\mu \mathrm{g} / \mathrm{l}$ )
- Total recoverable chromium $(\mathrm{Cr})(\mu \mathrm{g} / \mathrm{l})$
- Total recoverable copper $(\mathrm{Cu})(\mu \mathrm{g} / \mathrm{l})$
- Total recoverable lead $(\mathrm{Pb})(\mu \mathrm{g} / \mathrm{l})$
- Total recoverable nickel $(\mathrm{Ni})(\mu \mathrm{g} / \mathrm{l})$
- Total recoverable zinc ( Zn ) $(\mu \mathrm{g} / \mathrm{l})$


### 3.1.1 Findings Summary

2012 sample results were compared to values provided in a national monitoring database to determine how concentrations of constituents at Columbus outfalls during 2012 compared to national datasets. 2012 results were also compared with sampling results obtained during the 2007, 2008, 2009, 2010, and 2011 sampling seasons to determine if trends in stormwater water quality could be detected. A summary of these comparisons is presented below.

## Comparison of Outfall Monitoring Data to NSQD Data

With the following exceptions, the 2012 City sampling values and 6 -year program means at all sampling locations are generally consistent with national datasets based on the alignment of the quarterly data within the data ranges provided in the NSQD:

- The bacteria EMC values (fecal coli form) are generally higher than national medians, and individual records are, at times, greater than an order of magnitude in deviation of the NSQD median at all five locations.
- EMC values for $\mathrm{BOD}_{5}, \mathrm{COD}$, hardness, oil and grease, TSS, cadmium, copper, lead, and zinc at the industrial location (MH-03) are greater than the NSQD 75th percentile.
- Mean EMC values for fecal coli form, hardness, and lead at the high density residential location (MH-4B) are generally greater than the NSQD 75th percentile.
- With exception of MH-03, the six-year mean and median concentrations at all other land-use locations for total cadmium are less than the NSQD 25th percentile.
- The six-year mean and median concentrations for total recoverable metals are generally within the middle 50th NSQD percentile at all residential land use locations (MH-1A, MH4 B , and $\mathrm{MH}-05$ ).
- The six-year mean concentrations for hardness and fecal coli form are near or greater than the NSQD 75th percentile for all land uses.
E. coli, CBOD5, Alkalinity, cyanide, orthophosphate, and nitrite were not included in the comparisons because less than 100 events were available within the NSQD.

Comparison of Outfall Monitoring Data to 2007, 2008, 2009, 2010, and 2011 Sampling Results
Consideration of average event mean concentrations for years 2007 through 2012 reveals the following observations:

- Water quality levels vary from event to event, site to site and year to year as demonstrated by the variation in mean values. This is a common trend in stormwater due to range of outside and local factors that can impact water quality such as precipitation, air quality, and local maintenance practices.
- MH-03 has the highest average values for a majority of the parameters (BOD , COD, alkalinity, O\&G, hardness, nutrients, solids, and total metals) during all six years. With exception of MH-03, the other four sampling locations have average values generally within the same order of magnitude during all six years.
- Average oil \& grease values at MH-02 (commercial land-use) and MH-03 (industrial landuse) are higher than those for residential landuses.

The comparison of average values over the past six years indicates the water quality remained relatively consistent (i.e., the average values did not increase or decrease) at anyone site.

### 3.2 Illicit Discharge Detection and Elimination/Dry Weather Monitoring

As part of its Illicit Discharge Detection and Elimination (IDDE) program, the City conducted dry weather monitoring at stormwater outfalls during the January 1, 2012 to December 31, 2012 reporting period to identify the presence of illicit discharges in the City's storm sewer system. The City also investigated reports of illicit discharges into the City's storm sewer system received from the community. A full description of the activities conducted under the IDDE programs during the reporting period is provided in Section 2. The results of the dry weather outfall monitoring program are located in Appendix I, whereas a summary of illicit discharges confirmed as a result of dry weather outfall monitoring during the January 1, 2012 to December 31,2012 reporting period are provided below.
$\sqrt{ }$ An illicit discharge was detected during this reporting period at city outfall No. 0033 T 0499. The discharge was cloudy. Investigation revealed that the discharge was caused by a leaking city waterline. The discharge was reported to the City of Columbus Division of Power and Water for resolution.
$\sqrt{ }$ An illicit discharge was detected during this reporting period at city outfall No. 0118 T 0534. The discharge showed high levels of chlorine. Investigation revealed that the discharge was caused by a leaking city waterline. The discharge was reported to the City of Columbus Division of Power and Water for resolution.
$\sqrt{ }$ An illicit discharge was detected during this reporting period at city outfall No. 0081 T 0111. The discharge high levels of ammonia. Investigation revealed that the discharge was caused by a failing septic system. The discharge was reported to the City of Columbus Health Department for resolution.
$\sqrt{ }$ An illicit discharge was detected during this reporting period at city outfall No. 0118 T 0500 . The discharge showed high levels of chlorine. Investigation revealed that the discharge was caused by a leaking city waterline. The discharge was reported to the City of Columbus Division of Power and Water for resolution.
$\sqrt{ }$ An illicit discharge was detected during this reporting period at city outfall No. 0168 T 0057 . The discharge showed high levels of chlorine. Investigation revealed that the discharge was caused by a leaking city waterline. The discharge was reported to the City of Columbus Division of Power and Water for resolution.

## SECTION 4 - REVISIONS TO ASSESSMENT OF CONTROLS AND FISCAL ANALYSIS

There are no revisions necessary to the assessment of controls as implemented under the present permit.

Funds generated by the City of Columbus Stormwater Utility are used to cover all costs for Compliance with the NPDES permit and the City's stormwater Capital Improvements Program. The utility fee is collected from residential and non-residential customers. In 2012, a residential customer was charged one Equivalent Residential Unit (1 ERU $=2000 \mathrm{sq}$. ft) equal to $\$ 0.1472$ (effective $1 / 1 / 10$ ) per day for an average annual cost ( 365 days $x \$ 0.1472$ ) of $\$ 53.73$. Nonresidential customers pay the same ERU rate based on their total impervious area. The following table contains expenditures for the NPDES program during the reporting period,

| Category | Cost |
| :--- | ---: |
| Personnel | $\$ 1,320,054.50$ |
| Materials \& Supplies | $\$ 13,413.49$ |
| Services | $\$ 10,532,116.78$ |
| Street Cleaning | $\$ 6,027,669.51$ |
| Pro Rata Charges | $\$ 1,653,798.00$ |
| Debt Principal | $\$ 9,534,700.00$ |
| Other Expenditures | $\$ 81,474.92$ |
| Capital Outlay | $\$ 75,962.00$ |
| Interest on Debt | $\$ 5,966,783.53$ |
| Total Costs: | $\$ 35,205,972.73$ |

## SECTION 5 - SUMIMARY OF ENFORCEMENT, INSPECTIONS, PUBLIC EDUCATION, AND EMPLOYEE TRAINING

In addition to many other requests for service, SRMS and SMOC personnel made 84 investigations of reported or suspected illicit discharges and spills to the MS4 during the January 1, 2012 to December 31, 2012 reporting period. There were 2 cases where the City notified the Ohio EPA of an active illicit discharge to Waters of the State. No discharge or pollution problems were found during 9 of the investigations for suspected spills or illegal dumping. The appropriate Health Department (City or County) was notified in 4 cases involving discharges from a home sewage disposal system. SRMS also conducted a total of 4,583 construction site inspections, 70 industrial inspections, and 56 site inspections for post-construction BMP maintenance during the January 1, 2012 to December 31, 2012 reporting period.

### 5.1 Summary of Enforcement Actions

Enforcement action was taken by the City if a violation is observed and a responsible party is identified. Typically the responsible party is notified, the violation is stated and request made that immediate steps be taken to cease, prevent, control, and clean up pollutant sources that are, or may, be discharged into stormwater runoff. The SRMS issued 38 Notices of Violation (NOV) during the last reporting period. When a Notice of Violation is sent to the responsible party, an explanation of discharge and a Remedial Action Plan to prevent future occurrences is required. Requests for Voluntary Compliance are issued either verbally or written when the discharge or potential discharge is considered minor in nature and is immediately ceased.

### 5.1.1 Notices of Violation, Illicit Discharge

Summaries of the City's twenty (20) Notices of Violation for illicit discharges during the January 1, 2012 to December 31, 2012 reporting period are provided below.

2/3/12 Notice of Violation issued to TNT Powerwash Inc .for washing vehicles without inlet protection and allowing wash water to enter the City's MS4.

2/17/12 Notice of Violation issued to HSW Express Detail Center for washing vehicles without inlet protection and allowing wash water to enter the City's MS4.

2/23/12 Notice of Violation issued to Mango's Cafe at 21 Smith Place for power washing the store front with no inlet protection and allowing wash water to enter the City's MS4.

4/3/12 Notice of Violation issued to Rave Cinemas for allowing waste from the trash compactor to enter into the City's MS4.

4/9/12 Notice of Violation issued to Kenny-Oboyashi JV and the City of Columbus Division of Sewerage and Drainage for pumping sediment-laden water into the City's MS4.

4/13/12 Notice of Violation issued to Utilicon Corporation and the City of Columbus Division of Power and Water for pumping contaminated and sediment-laden water into the City's MS4.

5/4/12

6/6/12

6/12/12

7/25/12

8/28/12

9/4/12

9/4/12 Notice of Violation issued to Goo Goo Carwash at 2202 Polar Parkway for discharging wash water from vehicle washing activities into the City's MS4.

9/7/12 Notice of Violation issued to Los Potosinos at 170 North Hamilton Road for dumping mop water into the City's MS4.

10/11/12 Notice of Violation issued to Dirt 4 U for the discharge off saw cutting slurry into the City's MS4.

10/22/12 Notice of Violation issued to Mach I Auto Care for washing vehicles without inlet and allowing wash water to enter the City's MS4.

10/22/12 Notice of Violation issued to Tony Ricos On-the Go for washing vehicles without inlet protection and allowing wash water to enter the City's MS4.

10/23/12 Notice of Violation issued to JMO Builder for washing construction dirt into the City's MS4.

11/5/12 Notice of Violation issued to SC Wash and Tan at 1400 North High Street for power washing the sidewalks and discharging the wastewater into the City's MS4.

12/3/12 Notice of Violation issued to Starcraft Construction for power washing exterior of building and allowing the wash water to enter the City's MS4.

### 5.1.2 Notices of Violation, Erosion and Sediment Control

Eighteen (18) Notices of Violation were issued to property owners and/or contractors for noncompliance with the City of Columbus Construction Site Pollution Prevention Regulations during the January 1, 2012, to December 31, 2012, reporting period. Summaries of these Notices of Violation are provided below:

1/4/2012 Notice of Violation to the Elite Site Development and Excavating Company for pumping contaminated (soapy) water into a catch basin on the north side of 4550 Henderson Road. The site is a tributary of the Olentangy River.

1/12/2012 Notice of Violation and Assessment of Administrative Fine (\$500) to Columbia Gas of Ohio for pumping muddy water from a street excavation into an unprotected curb inlet at E. Ninth Avenue west of Indianola Avenue. The site is a tributary of the Olentangy River.

1/27/2012 Notice of Violation and Assessment of Administrative Fine ( $\$ 1,000$ ) to Columbia Gas of Ohio for pumping cloudy, heavily sediment-laden water from excavation site into an unprotected curb inlet in Walhalla Ravine. NPL was sub-contractor, The site is a tributary of the Olentangy River.

2/16/2012 Notice of Violation to CRA-CO Investments. Failure to submit a SWPPP and file an NOI prior to beginning earth-disturbing activities on Camden Road (parcels 010-003318-00 and 010-190309-00). The site is a tributary of Alum Creek.

2/16/2012 Notice of Violation and Assessment of Administrative Fine (\$500) to SmootElford Resource Management, for SWP3 non-compliance at the Starling Grade School (CC-15870) and (CC-15872). Sediment basins and risers were not completed despite repeated inspections and resulted in sediment discharge into unprotected storm sewers and/or curb inlets. The site is a tributary of the Scioto River.

2/16/2012 Notice of Violation and Assessment of Administrative Fine $(\$ 1,000)$ to Columbia Gas of Ohio for pumping sediment-laden water into an unprotected curb inlet on N. Fourth Street, north of Chittenden Avenue. The site is a tributary of the Olentangy River.

3/08/2012 Notice of Violation and Assessment of Administrative Fine (\$500) to the E. Broad Street Menards. Contractors failed to install sediment risers required by storm sewer plan (CC-15935) and also pumped unfiltered muddy water directly into Untzinger Ditch. The site is a tributary of the Blacklick Creek.

3/08/2012 Notice of Violation to Synergy Group, Inc., general contractor of the Menards Store (CC-15935). (See NOV and Administrative Fine listed above; same project.)

3/08/2012 Notice of Violation to Superior Excavating, Inc., excavator of the Menards Store (CC-15935). (See NOV and Administrative Fine listed above; same project.)

4/30/2012 Notice of Violation to the City of Columbus, Division of Power and Water for pumping sediment-laden water into an unprotected curb inlet on Sullivant Avenue near Oakley Avenue. The site is a tributary of the Scioto River.

4/30/2012 Notice of Violation to the City of Columbus, Division of Power and Water for pumping contaminated, sediment-laden water into an unprotected curb inlet on Sullivant Avenue near Oakley Avenue. The site is a tributary of the Scioto River.

4/30/2012 Notice of Violation to the City of Columbus, Division of Power and Water for pumping sediment-laden water into an unprotected curb inlet on Sullivant Avenue near Columbian Avenue. The site is a tributary of the Scioto River.

4/30/2012 Notice of Violation to the Utilicom Corporation, for pumping sediment-laden water into an unprotected curb inlet on Sullivant Avenue near Oakley Avenue. The site is a tributary of the Scioto River.

4/30/2012 Notice of Violation and Assessment of Administrative Fine (\$500) to the Utilicom Corporation for pumping contaminated, sediment-laden water into an unprotected curb inlet on Sullivant Avenue near Oakley Avenue. The site is a tributary of the Scioto River.

5/21/2012 Notice of Violation and Assessment of Administrative Fine (\$500) to KennyOboyashi Joint Ventures for pumping contaminated, sediment-laden water into the City's MS4. The violation took place at the OARS tunneling project at 2020 Jackson Pike. The site is a tributary to the Scioto River.

5/21/2012 Notice of Violation to the City of Columbus, Division of Sewerage and Drainage for pumping contaminated, sediment-laden water into the City's MS4. The City of Columbus, DOSD is the owner of the project. The site is a tributary to the Scioto River. (See NOV and Administrative Fine listed above; same project. DOSD is the Owner of the Capital Improvement Project).

9/5/2012 Notice of Violation to Ruscilli Construction Company, Inc. for allowing a direct discharge of sediment-laden water into the City's MS4. The violation took place at the OSU Schottenstein Center - Basketball Practice Facility (CC-15712). The site is a tributary to the Olentangy River.

9/5/2012 Notice of Violation to the City of Columbus, Division of Power and Water for pumping, sediment-laden water into an unprotected curb inlet on Hudson and North Fourth Streets. The site is a tributary of the Olentangy River.

### 5.1.3 Notices of Violation, Post Construction BMP Maintenance

No Notices of Violation were issued to property owners for non-compliance with the post construction BMP maintenance requirements during the January 1, 2012, to December 31, 2012, reporting period.

### 5.1.4 Notices of Violation, Industrial

No Notices of Violation for illicit discharges from industrial facilities subject to 40 CFR
$122.26(\mathrm{~b})(14)$ were issued during the January 1, 2012 to December 31, 2012 reporting period.

### 5.2 Summary of Public Education and Employee Training Programs

The City of Columbus recognizes that both public education/public participation and employee education programs that provide information and educational materials to residents, business owners, and city employees can result in improved water quality by addressing many activities that could have an adverse impact at the non-point source level. Department of Public Utilities staff is educated and supported in implementing stormwater protection activities by way of the Environmental Management System.

The City will conduct an audit of its stormwater public education program as part of its Stormwater Strategic Plan project. Recommendations from the audit will be used to guide the MS4 public education program. As part of the City's Integrated Plan, City staff, a city-wide steering committee and residents will be educated on the benefits of green infrastructure and engaged in the process of determining whether green or gray infrastructure will be used to eliminate sanitary sewer overflows as part of our Wet Weather Management Plan.

In 2014 the City will engage stakeholders in developing a branding symbol and a unified message for stormwater protection. Until that time, the "We All Live Downstream" public education program continues to include brochures distributed through community newspapers, as well as newsletters and fliers mailed through customer bills. Other outreach vehicles used include the department's Web site, our Facebook page which is steadily gaining new followers, news releases to the media and distribution through several community events throughout the year. The "No Dumping, Drains to Rivers" storm drain marking program also provides for more community awareness of potential impacts of residential pollution on the quality of our rivers. The markers display the phone number residents can use to report potential stormwater issues, 645-STREAM (7873). In addition to the drain marking program, the Central Ohio River Pride month and other litter cleanups provide a way for the community to become involved in the effort as volunteers. See Appendix C for a summary of Public Education and Outreach activities.

The City continues to increase stormwater pollution awareness among its employees by providing information on stormwater pollution prevention at new employee orientations and during training conducted to familiarize staff with Stormwater Pollution Prevention Plan contents. Under its EMS, the City has developed on-line training modules covering the BMPs for various City activities such as vehicle washing. The City conducted or participated in numerous training opportunities during the 2012 reporting period. The City will continue to
provide training on stormwater pollution practices to personnel that work at operations and maintenance facilities. More information regarding the public education, public participation, and employee education activities are presented in the City's Stormwater Management Plan. See Appendix H for a summary of employee training activities.



| Outfall_ID | Diameter Landuse | Receiving_Stream | Northing | Easting | $\mathrm{N}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0744 T 0035 | 24 Industrial | Noble Run (Alum Creek) | 770057.92 | 1831176.05 |  |
| 0477 T0395 | 27 Residential | Powell Ditch (Blacklick Creek) | 699693.42 | 1879850.39 |  |
| 0394 T 1216 | 36 Commercial | Powell Ditch (Blacklick Creek) | 702327.01 | 1875240.57 |  |

Figure 1
Proposed Wet Weather Monitoring Locations February 10, 2012

## Legend

↔ Proposed Monitoring Locations Streams

Major Roads
Columbus Corportation Limits

Public Education and Outreach
2012 Activity Summary

| We All Live Downstream Program 2012 | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WALD print guides distributed: <br> - Newspaper insertion <br> - City <br> Recreation and Senior Centers <br> - Columbus Zoo <br> - Neighborhood Pride <br> - Other/by request <br> Total | - | - |  | $150$ $150$ | 60 <br> 5 <br> 65 | 162,870 <br> 60 15 162,945 | 60 <br> 12 <br> 168 | $60$ $60$ | 60 <br> 20 <br> 50 | - | $15$ $15$ | - | 163,453 |
| Storm drain markers requested (seasonal) | - | - | - | 30 | 15 | 30 | 60 | 510 | 90 | - | 150 | - | 885 |
| River Ranger guides requested | - | - | - | 10 | 3 | 15 | 12 | 18 | 9 | - | 12 | - | 79 |
| Bill inserts <br> Total | - | - | - | (River <br> Pride, <br> Storm <br> Drain <br> Marking, started 4/10) <br> 75,305 | (River <br> Pride, <br> Storm <br> Drain <br> Marking) <br> 98,333 | (River <br> Pride, <br> Storm <br> Drain <br> Marking) <br> 92,439 | (River <br> Pride, Storm Drain to 7/10; then GreenSpot, CSOISSO FAQ) 30,8871 71,732 | (GreenSpot, CSOISSO FAQ) $103,092$ | (GreenSpot, CSOISSO FAQ) <br> 88,191 | $\begin{aligned} & \text { (Green- } \\ & \text { Spot, } \\ & \text { CSO/SSO } \\ & \text { FAQ, } \\ & \text { ended } \\ & 10 / 10 \text { ) } \\ & \\ & \\ & \\ & \\ & \\ & \end{aligned}$ | - | - | 595,680 |
| News releases | - | 1 FB post | 1 FB post | $\begin{aligned} & 5 \mathrm{FB} \\ & \text { posts } \end{aligned}$ | $\begin{aligned} & 2 \mathrm{FB} \\ & \text { posts } \end{aligned}$ | 1 (River Pride) +3 <br> FB posts | $\begin{aligned} & 3 \mathrm{FB} \\ & \text { posts } \end{aligned}$ | $\begin{aligned} & 8 \mathrm{FB} \\ & \text { posts } \\ & \hline \end{aligned}$ | $\begin{array}{r} 6 \mathrm{FB} \\ \text { posts } \\ \hline \end{array}$ | $\begin{aligned} & 9 \mathrm{FB} \\ & \text { posts } \\ & \hline \end{aligned}$ | $\begin{gathered} 1 \text { (FOG)+ } \\ 5 \mathrm{FB} \\ \text { posts } \\ \hline \end{gathered}$ | - | $\begin{aligned} & \hline 2 \text { (+43 } \\ & \text { FB posts) } \end{aligned}$ |

Public Education and Outreach
2012 Activity Summary

| We All Live Downstream Program 2012 | Jan. | Feb. | March | April | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Waterway cleanups (seasonal) | - | - | - | - | - | 3 | - | - | 1 | - | - | - | 4 |
| Public service announcements | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | GTC-3 | $\begin{array}{r} 12 \\ \text { months } \end{array}$ |
| Information available on Web? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | $\begin{array}{r} 12 \\ \text { months } \end{array}$ |
| Special events/other |  | Watershed booth at Sports, Vac. \& Boat Show; Watershed pres. at Hoover Fishing Seminar; Compost at CENTS | Compost Facility display at Home and Garden Show | Watershed booth at Cols. Zoo Earth Day event.; same at COSI on env. stewardship. Launched '12 Stream Line. | River Pride/ RiverFest mention- ed in SWIFT newsletter Central Ohio Children's Water Festival; 1 Neighbor hood Pride event | Cleanups plus rain barrel workshop as part of River Pride; 1 Neighbor hood Pride event | 1 <br> Neighborhood Pride event. | Presentation for MORPC, Green Infrastructure Griggs and O'Shaugh nessy | WALD <br> promoted <br> in fall issue of SWIFT newsletter Hoover cleanup | Green Infrastructure and Integrated Planning presentation at 5Cities+ conf. in Columbus |  |  |  |

For immediate release
May 29, 2012
Contact: George Zonders, 645-2926

## River Pride 2012 events, schedule announced

The Columbus Department of Public Utilities and partners will kick off the 12th annual Central Ohio River Pride event in June. This month-long event is designed to promote awareness and appreciation of our natural waterways through environmental stewardship and recreation. Activities include stream-bank litter cleanups, invasive plant removal, rain garden workshops and other opportunities as listed below. Volunteers and participants are invited to the following events:

| Date/Time | Location | Contact/Sponsoring Organization |
| :--- | :--- | :--- |
| Saturday, June 2 <br> 9:00 a.m. | Griggs Reservoir <br> (litter cleanup) | Columbus Department of Public Utilities/ <br> Scioto Boat Club, 645-1748 |
| Saturday, June 9 <br> 9:00 a.m. | Adena Brook <br> (litter cleanup and <br> invasive plant removal) | Adena Brook Community <br> adenaderek@gmail.com, 447-8043 |
| Saturday, June 16 <br> 9:00 a.m. | Alum Creek <br> (litter cleanup and <br> canoe float) | Friends of Alum Creek and Tributaries <br> 569-8544, <br> canoe@friendsofalumcreek.org |

## Other Ways to Get Involved:

Contact any of the listed organizations to participate in additional opportunities they may offer throughout the year.

Plan your own neighborhood or waterway cleanup. Contact Keep Columbus Beautiful for assistance and supplies by calling 645-8027, or your local municipality if you live outside Columbus.

Organize a storm drain marking community service project in your Columbus neighborhood to get involved on an individual or group level. This is an ongoing project limited to dry weather conditions.

The following organizations plan periodic events and/or are excellent sources of stewardship information:

Friends of the Lower Olentangy (FLOW) organizes free educational events and service activities including litter cleanup, removal of invasive plants, and rain barrel seminars across the Olentangy Watershed; call (614) 267-3386 or check FLOW's Facebook page or Website calendar at www.olentangywatershed.org

Friends of the Scioto River promotes the protection and enjoyment of the Scioto River valley and organizes several cleanups each year; contact info@sciotoriverfriends.org

Franklin Soil and Water Conservation District encourages conservation through a variety of activities, services and educational materials; visit www.franklinswcd.org

Riverfest On Tour! includes a full month of activities, capped by a grand finale June 29 in partnership with COSI. A service of the Mid-Ohio Regional Planning Commission, special weekend activities will continue through the month. For a complete schedule, please visit www.riverfestcolumbus.org or call (614) 228-2663.

For immediate release
June 25, 2012
Contact: George Zonders, Public Utilities, 645-2926
John Ivanic, City Council, 645-7698

## Planning for Removal of Fifth Avenue Dam Moves Forward Restoration Major Component of Legislation

Major commitments from the Ohio Environmental Protection Agency and The Ohio State University have allowed the Columbus Department of Public Utilities to move forward with plans to remove the Fifth Avenue lowhead dam and restore the natural flow of the Olentangy River through the university area. This \$6.9 million project, which includes natural channel design techniques and native planting along the Olentangy, would not be possible without more than $\$ 3.6$ million in grant funding from Ohio EPA and $\$ 2$ million from OSU.
"This project is an example of our commitment to provide responsible stewardship of our natural resources," said Mayor Michael B. Coleman. "We are grateful to the Ohio Environmental Protection Agency and The Ohio State University for the funding they have pledged toward this plan."

The removal of the dam, along with planned shoreline restoration, will result in the return of a more natural habitat and ecosystem along the Olentangy between the area north of the OSU campus and downtown Columbus. Columbus is working with Columbus Downtown Development Corp. and other partners on a four-year plan to remove the Main Street Dam, which would restore the Downtown riverfront to its natural state and create 33 acres of additional green space.
"One of the critical first steps of the University's long-range vision for our physical campus is the restoration of the river corridor that, like the Oval, will be a focal point over the next century at Ohio State and in the community for learning, recreation, and traditions," said E. Gordon Gee, president of The Ohio State University.

Passage of legislation by Columbus City Council sets the stage for actual removal of the dam to begin this fall, when expected lower water levels would facilitate the project.
"The removal of the dam will help the Olentangy River return to its natural state for the benefit of the environment and community," said Councilmember Eileen Y. Paley, chair of the Public Utilities Committee. "This is the right thing to do and will leave a safer waterway for generations to come,"

Removal of the Fifth Avenue Dam was identified in the 2002 and 2004 consent decrees signed by the City of Columbus and the Ohio EPA.
"Ohio EPA is committed to working with partner organizations to help improve water quality all across the state," said Ohio EPA Director Scott Nally. "In this case, the dam removal will transform a once stagnant waterway into the vibrant and vital river it should be."

For immediate release
September 13, 2012
Contact: Dan Williamson, Mayor's Office, 645-5300
Erin Miller, Environmental Steward, 645-0815
George Zonders, Public Utilities, 645-2926
Chris Abbruzzese, Ohio EPA, 644-2782
Lindsay Komlanc, OSU, 292-2041

## Restoration of the Olentangy River near OSU Moves Forward Following Fifth Avenue Dam Work

Mayor Michael B. Coleman joined Ohio EPA Director Scott Nally, Ohio State University Senior Vice President for Administration and Planning Jay Kasey and others to update progress on work to restore the Olentangy River corridor near the university, which began with partial removal of the Fifth Avenue dam. Mayor Coleman noted the partnership required to make this $\$ 6.9$ million project a reality.
"This project is an example of our commitment to provide responsible stewardship of our natural resources," said Mayor Michael B. Coleman. "We are grateful to the Ohio Environmental Protection Agency and The Ohio State University for the funding they have pledged toward this plan."

Benefits of this long-term project include restoring a more natural flow to the Olentangy through the OSU campus area, which is anticipated to encourage wider varieties of animal and plant life. Work will continue in 2013 and beyond to restore the area upstream of the dam by defining the river channel complete with riffles and pools, setting aside areas for wetlands and establishing native species of grasses and other plants. The Ohio Environmental Protection Agency is contributing a total of $\$ 3.6$ million in grants toward these efforts.
"The river restoration project will transform a once stagnant waterway into the vibrant and vital river it should be," said Ohio EPA Director Scott Nally. "Legacy dam removal is just another example of how the great partnerships Ohio EPA is forging with our local communities and research institutions can improve water quality across the state."

The first part of the project involved completely removing approximately one third (about 180 linear feet) of the dam, enough to restore a natural channel for the Olentangy. Along the remaining length of the dam, the top two feet has been removed and what is left will eventually be completely covered by a new embankment area. The dam was originally built in 1935 to supply water for a power plant on the OSU campus; now the university is contributing $\$ 2$ million dollars toward the project and has big plans for the restored river corridor with research and recreational opportunities.
"The restored river corridor is a cornerstone of the University's long-range vision and will represent one of our most important natural features," said Jay Kasey, OSU Senior Vice President for Administration \& Planning. "It will become a focal point of economic activity, clinical care and research, and unique academic endeavors."

Columbus City Council has played a key role in monitoring this project through inspection and approval of funding legislation, with an eye toward applying lessons learned here toward the removal of the Main Street dam downtown planned for 2014.
"Columbus' Downtown Strategic Plan speaks to the need to clean our rivers, repair environmental damage and improve local water ways to open opportunities for recreation," said Council President Andrew J. Ginther. "Removing this low-head dam brings us one step closer to developing the Scioto-Olentangy greenway corridor, creating a navigable waterway, and adding acres of green space that will be enjoyed by Columbus residents and visitors for decades to come."

Another key partner in this project is the non-profit volunteer group Friends of the Lower Olentangy (FLOW), advocates for the river who are donating time to update and educate the public along the corridor as well as helping to relocate species of mussels native to the Olentangy to other areas of the river (http://www.olentangywatershed.org/). In addition, Battelle Memorial Institute - just east of the dam itself - has provided live project views via an online "dam cam" (http://www.truelook.com/clients/messer-webcam/)

For immediate release
November 21, 2012
Contact: George Zonders, Department of Public Utilities
614 645-2926

## Reminder: Don't Pour Cooking Oils, Grease Down the Drain Fats, oils and grease can clog sewers, resulting in basement backups and costly repairs

A reminder this holiday season: do not pour cooking fats, oils and grease (FOG) down drains or toilets while preparing Thanksgiving and other holiday meals. FOG will clog sewer pipes, which can then cause sewer overflows and basement backups. Cleaning a FOG sewer clog in the public right of way costs the city at least $\$ 1,500$ per job; property owners are responsible for cleaning clogs in sewer lines on their own properties.

To dispose of FOG in your trash, first make sure it is in solid form:

- Try to absorb the grease. For small amounts of grease in a pan, let the grease congeal and wipe with paper towels, or;
- Pour the grease into a container with wood shavings or cat litter.
- Another option is to place the grease in a strong container (tin can or bottle) and freeze until solid.

And remember, cooking oil can be re-used; do not throw it away if you can re-use it.
For larger amounts of cooking FOG, place in a tightly-sealed container and drop it off at the Solid Waste Authority of Central Ohio's (SWACO) Household Hazardous Waste location at 645 East $8^{\text {th }}$ Avenue, Wednesdays noon -6 p.m., Thursdays 9 a.m. -5 p.m. and Fridays noon -6 p.m. Contact SWACO at 871-5100 or visit www.swaco.org

The Department of Public Utilities' preventative sewer maintenance program reduces the number of sanitary sewer overflows (SSO) tied to FOG clogs in city sewers. In 2011, a total of five FOG-related blockages resulted in sanitary sewer overflows. The department also distributes informational door hangers in areas where FOG problems have occurred in the past and works directly with local food establishments to encourage the most effective FOG management practices available.


Columbus Public Utilities shared a link. November 30, 2012

Are you a history buff? A Water Division retiree has published a book about how Columbus was a pioneer in the field of water treatment, available through the Columbus Metro Library system, the Columbus Landmark Foundation, Barnes and Noble and Amazon. Here is a description:

The Great Columbus Experiment of 1908
columbuslandmarks.org
columbuslandmarks.org
The Great Columbus Experiment of 1908 Waterworks That Changed the World by Conrade C. Hinds Columbus' water tragedy became the world's

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60 people saw this post
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Columbus Public Utilities shared American Rivers's photo. Novenber 28, 2012

Check out this really cool interactive simulation of how a rain garden works from the University of Nebraska extension service - http://bil.ly/ruDXUT -Try selecting different pleces and seeing how each works!

Then take a look at some of...See Mare

|  |  |
| :---: | :---: |
| or Mastercard gift card, ingcoutahivausiPuID to pay a Columbús http://publicutilities.colun | can be used for so many things <br>  lity bill on-line or over the phone. us.gov/Doclisting. aspx?id=36839 |
| PayBills | Public Utilities, Columbus, Ohlo publicutilities.columbus.gov <br> Pay your bill on-line via credit/debit card using the most secure on-line payment system available or call 800-824-2375. Only cards that display the Visa or |
| Like - Comment - Share 54 people saw this post | Promote |

Columbus Public Utilities shared a link.
November 20, 2012

To check to see if your Columbus home or business may be in our municipal power service area, please call 645-7216.
http://www.dispatch.com/content/stories/local/2012/11/20/ city-plans-to-split-power-water-offices.htm www.dispatch.com

Like - Comment ' Share
64 people saw this post
Promote

Columbus Public Utilities
November 20, 2012

Do you Twitter? If so, please follow us @CDPU. Facebook will remain our primary social media tool because it seems to be what most of our customers prefer, but we will share news releases, any major boil water alerts or outages and retweet some items of interest from Twitter.

```
Like ' Comment S Share
97 people saw this post
Promote
```

Columbus Public Utilities shared Friends of the Lower Olentangy Watershed (FLOW)'s photo.
November 12, 2012

Thanks to FLOW and the dedicated volunteers we have in central Ohio, one of our rivers is now cleaner. If you are interested in

 Le cat gucow. Evan a smal ica con athe from cent res skicae wa. to tomprostanatily 187 callas of vaste: ain te tre rest matelf, Hic zasion can tocolicat wate from nasty the Sary hard watare that drain th De


Like • Comment ' Share
69 people saw this post
Promote

Columbus Public Utilities shared a link.
November 21, 2012

Getting ready to prepare that holiday meal? Don't forget to plan ahead when it comes to properly disposing of cooking grease and oils!
http://publicutilities.columbus.gov/content.aspx?id=47043


Holiday Reminder - Public Utilities,
Columbus, Ohio
publicutilities.columbus.gov
A reminder this holiday season: do not pour cooking fats, oils and grease (FOG) down drains or toilets while preparing

[^19]Promote

Columbus Public Utilities November 15, 2012

Colder temperatures can encourage water line breaks; it's the nature of our climate. Please report suspected water line breaks to 311 or 645-3111. If you see water ponding or running in the street and it has not rained, that may be the cause. After hours, Distribution Maintenance can be reached 24/7 through the 311 prompts or call directly to 645-7788. Also, the city is responsible from the curb box to the main lines in the right of way but owners are responsible for repairs after the curb box to the home. Our crews can check and advise which side a leak may be on.


俍 Olentangy Watershed (FLOW)'s photo,
November 6, 2012

Sharing this opportunity from one of our partners.

We're tentatively planning an Olentangy River Litter Clean up between Lane Ave and Woody Hayes Drive for Saturday November 10 from 9am to noon. If you would like to help, send us a message at info@olentangywatershed.org and we'll keep you in the loop on our plans.

88 people saw this post

Status Photo / Video [1] Event, Milestone +
\} Columbus Public Utillies shared a note via Columbus City Council.
November 8, 2012

2013 City of Columbus Public Utilities Rate Hearing next week; detalls here.

```
Columbus City Council Holds Rate Adjustment Hearing
MEDIA ADVISORY
For Immediate Advisory
November 8, }201
For More Information:
John Ivanic, (614) 645-6798
..
Continue Reading ...
```

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37 people saw this post

Water outage planned for west side area due to water line valve repair needed on Saturday from 8:00 AM to 3:00 PM. Signs will be posted in the area affected, which is bounded roughly by:

- Sullivant Avenue on the north
- Hall Road on the south
- Pamlico Avenue on the west
- Norton Road on the east to also include the neighborhood off Norton: Marci Way, Westbury Drive, Deignese Place and Piper Meadows Drive.
No boil water alert is expected to be necessary when the water is turned back on in the afternoon. For questions, please call Water Distribution Maintenance at 645-7788.

Like ' Comment • Share

86 people saw this post
Promote

[^20]Great opportunity for neighborhood leaders!


Neighborhood Pride - Department of Development, Columbus, Ohio www.columbus.gov

Neighborhood Pride is at the heart of Mayor Michael B, Coleman's vision to make Columbus"the best city in the nation in which

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41 people saw this post
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> Columbus Public Utilities Timeline
2012


Like : Comment • Share
52 people saw this post
Promote

Columbus Public Utilities
November 1, 2012

Asking for some input from our FB fans on other social media. In an emergency situation like the east coast has endured, after electronic news media or if they were not accessible, what social media vehicle would you turn to first for information on power and water outages etc.? Do you use Twitter and if so, how does it differ from how you use Facebook? Thank you in advance for your input!

## Status

Photo / Video [3. Event, Milestone + Winter heating assistance was in the local news this week. If the topic comes up in your circle of family and friends, please remind them if they are eligible for HEAP, they may also be eligible for Columbus' low income water/sewer discount program. We also have a senior discount program for water and power. Please see link below for more info or call Customer Service at 645-8276.

Utility Discount Programs - Publlc Utilities, Columbus, Ohlo publicutilities.columbus,gov

Low Income - Single Family PropertyPrograma de Descuento por Bajo Ingreso para Cargos de Agua y CloacaLow Income Discount Application in Spanish (en Espanol)Low Income - Multi Fanilly Property

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41 people saw this post
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Activity
November 2012
People Who Like This

## 2

People Talking About This Visits

7
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31 people saw this post
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Columbus Public Utilities shared a link. October 26, 2012

Drop off and recycle e-waste tomorrow (Saturday) at the Whetstone Park of Roses, North High Street and Hollenback Road, from 9:00 a.m. to 4:00 p.m. Computers, cellphones, televisions and other electronics will be accepted; attached is a li...See More

Like ' Comment ' Share

46 people saw this post
Promote

Columbus Public Utilities shared a link. October 22, 2012

The U.S. Environmental Protection Agency developed How's My Waterway app and website to provide information about the quality of local water bodies simply by entering a zip code or city name. The release of the app and website helps mark th...See More

```
Redirect
www.epa.gov
```



Columbus Put:
[13) Event, Milestone +

2

Signage Installed at Griggs, O'Shaughnessy \& Hoover Regervoirs invites 36 painR the green infrastructure Installed there.

Columbus Public Utilities shared a link.
October 29, 2012

The National Weather Service has issued a high wind warning for central Ohio, effective untll 6:00 p.m. Tuesday (Oct. 30) with wind gusts topping 60 mph possible. In the event of fallen power lines, remember: keep at least 10 feet away and..,see More
http://www.franklincountyohio.gov/emahs/documents/factsh eet_windstorm.pdf
www,franklincountyohio.gov

Like ' Comment ' Share
42 people saw this post
Promote

Columbus Public Utilities shared a link.
October 25, 2012

It is that time of year...the end of the 2012 rain barrel season is drawing near! The website will officially shut down on November 2nd at the end of the business day. The program will return in 2013, so stay tuned for workshops coming in early spring!
http://stormwater.franklinswed.org/


Franklin Soll and Water Storm Water Education - GreenSpot Rain Barrel Program stormwater.franklinswcd.org

Eligiblity:While we'd love to have everyone participate in this cost-share opportunity, sadly we cannot. This program is open only to households in

Like ' Comment 'Share

$$
49 \text { people saw this post }
$$



In other central Ohio dam removal news, demolition of the Prospect Dam has begun. This is part of our Upground Reservoir project, in partnership with Del-Co Water.

Dam demolition
www.marionstar.com
PROSPECT - The Prospect Dam, south of Prospect, is putting up a fight.


Waterline valve repair job planned in the Clintonville area tomorrow AM is expected to cause some water service interruptions or low water pressure. Details below: http://publicutilities,columbus.gov/content.aspx?id=54919

## 10-13 Water Repalr in Clintonville - Public Utilities, Columbus, Ohio <br> publicutilities.columbus.gov <br> City of Columbus Waterline Valve Repair Work to Affect Water Service in the Walhalla Ravine/Clintonville Area on Saturday

Like ' Comment • Share
43 people saw this post
Promote its last mobile household hazardous waste (HHW) drop-off event of 2012 this Saturday, October 13 from 8:00 a.m. to 2:00 p.m. at TOSOH SMD Inc., 3600 Gantz Road in Grove City. Fo...See More

```
http://www.swaco.org/Uploads/Documents/HHW/HHWOnly.pdf www.swaco.org
```

Like - Comment Share
60 people saw this post


September 2012


Congratulations to DPU staff for their work to make this project a success!

[^21]

Columbus Public Utilities shared a link. September 6, 2012

Everyone dislikes unsightly trash, particularly along our waterways and reservoirs, so here is another opportunity to get after it. Volunteers are needed for this one on September 29 in the Westerville area.


Annual Hoover Reservoir Litter Cleanup Public Utilities, Columbus, Ohlo publicutlilities.columbus.gov

Gloves, bags, beverages and snacks will be provided. All volunteers should meet at the shelter house at the lower west side of Hoover

Like • Comment - Share
82 people saw this post
Promote

Columbus Public Utilities shared a link. September 5, 2012

Another of our great local volunteer groups, the Adena Brook Community, is organizing a clean-up this Saturday morning (September 8) staging from locations along Overbrook Drive between High Street and Indianola Avenue, from 9:00 to 11:00 a.m. Activities will include picking up litter and removing invasive



Columbus Public Utilities shared a link.
August 31, 2012
Help keep our waterways clean by taking advantage of SWACO's free service and disposing of household hazardous waste at their permanent drop-off center located at the corner of 8th and Essex Avenue, or check out their mobile collection schedule.

Likes
August 2012




Like • Comment - Share
3
106 people saw this post
Promote

Columbus Public Utilities shared a link via Mayor Mike
Coleman.
August 24, 2012

| Small Business Conference \& Expo, Columbus, |
| :---: | :--- |

Rafrowyard
Small businesses are the heart of our local economy, providing jobs and services that are essential to our future. Every day the City of Columbus depends on

Like ' Comment ' Share
86 people saw this post
Promote

Columbus Public Utilities shared a link.
August 22, 2012

Just a reminder for anyone you may know who struggles to meet their bills that we have discount programs available for qualifying low-income customers. We also have senior discounts available for our water and city power customers. For more info, please call Customer Service at 645-8276 or visit the link below.


Utility Discount Programs - Public Utilities, Columbus, Ohio
publicutilities.columbus.gov
Low Income - Single Family PropertyPrograma de Descuento por Bajo Ingreso para Cargos de Agua y Cloaca Low Income Discount Application

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102 people saw this post
Promote

Columbus Public Utilities shared a link via Mayor Mike Coleman.
August 17, 2012

Home
www.columbusvolunteerchallenge.org


Columbus Public Utilities shared Mayor Mike Coleman's photo.
August 17, 2012

Join us this Saturday August 18th at the Columbus Commons for the Mayor's Neighborhood Pride Columbus (Ohio) Block Party!


Like • Comment ' Share
96 people saw this post
Promote


Columbus Public Utilities
August 14, 2012

Columbus water customers may see ads or recelve solicitations from water or sewer line insurance companies from time to time. We are sometimes asked if the city takes a position or has a partnership with any of the companies that offer homeowner line policies and the answer is no. We maintain the city's lines and the property owner is responsible for their homeowner service line. When in doubt as to which side a problem may be on, please report it to 311 or 645-3111 so a crew can check it out.

Like ' Comment ' Share
152 people saw this post
Promote

Columbus Public Utilities shared a link. August 16, 2012

Our thanks to the many volunteer watershed protection organizations who lend helping hands with important projects/ike this one: removal of invasive honeysuckle. The link belowdetails the Ecological Restoration Program through Columbus
R...See More


## Programs

 parks.columbus.govColumbus Ecological Restoration Program Honeysuckle is a big concern for our parks and we would appreclate your help in eradicating this invasive plant species. Although honeysuckle can

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32
116 people saw thls post
Promote

Columbus Public Utilities shared a note via Neighborhood Pride Columbus (Ohlo), August 14, 2012

Where else can you participate in a flash mob, get free flip flops and play "Stormhole" with our water rangers? Our department will be giving out free What's Up with Conserving Water booklets for kids too.

Mayor Coleman Invites Families to Summer Block Party Mayor Coleman Invites Familles to Summer Block Party
Mayor Michael B. Coleman and Franklin County Children's Services invites families and children to visit Columbus Commons August 18 from 10 a.m. to 3 for Mayor Coleman's Neighborhood Pride...
Continue Reading ...

Like ' Comment ' Share
105 people saw this post
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Columbus Public Utilities shared a link. August 14, 2012

COSI's very educational Water exhibit will leave CBus in a few weeks. If you didn't get a chance to see it, there is still time through September 3.


July 2012

Columbus Public Utilities shared FACT - Friends of Alum Creek and Tributaries's photo,
July 24, 2012
A great example of how our local watershed groups are working with schools and community groups to help water quality in our region, which benefits all of us.

Check out the split rail wooden fencing installed along Westerville School District's greenway preserve. In early 2010 FACT convinced maintenance staff that there was no need to mow this floodplain site. Located next to some of Spring Run's...See Mare

Columbus Public Utilities shared a link. July 24, 2012

On a day when central Ohio is getting some rain, check out this Dispatch article that explains how plants are being used to keep pollutants carried by stormwater from washing into the reservoirs.


Working gardens: City uses special plants, soll to keep storm runoff from reservolrs
www.dispatch.com
The wildest, most overgrown areas along the shores of Columbus' drinking-

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5
185 people saw this post
Promote

Columbus Public Utilities July 19, 2012

If you need to water your lawn, just a reminder that it is more effective to do in the morning or evening. Running sprinklers during the hottest points of the day causes water loss through evaporation.


Columbus Public Utilities
July 6, 2012

A friendly reminder: we know it's tempting in this scorching weather, but it is illegal to open neighborhood fire hydrants (per City Codes 1103.01 and 2517.04). Illegally opening fire hydrants can hamper firefighting capabilities, drain the city's water supply and cause damage to fire hydrants, water mains, and private property. If you see someone tampering with a fire hydrant, please call Columbus Police at (614) 645-4545.

Like ' Comment ' Share
Columbus Public Utilities shared Mayor Mike Coleman's status.
July 3, 2012

If you are coming in to pay your water bill today at 910 Dublin Road, there is a box on our lower level if you would like to contribute anything to the Mid Ohio Food Bank to help the folks who are without power and lost food.

City of Columbus employees are doing their part to help Columbus residents by donating non-expired, non-perishable food items at four locations. The boxes are filling up quickly.

100 people say this post
Promote Columbus Puk: uly 3, 2012
Columbus Public Utilit egerlioheribediedple, places and things
July 3, 2012
Columbus Public Utilities Timeline 2012
is now available on-line at the below link:
http://publicutilities.columbus.gov/WorkArea/linkit.aspx?
LinkIdentifier=id\&itemID=52496
publicutilities.columbus.gov

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85 people saw this post
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Columbus Public Utilites July 2, 2012

Columbus Public Utilities Timeline 2012 is now available on-line at the below link LinkIdentifier=id\&ItemID=52496 publicutilities.columbus.gov

Water boll alert for the Godown Road area has been cancelled.

Like - Comment • Share
71 people saw this post
Promote

Columbus Public Utilities shared a link.
July 2, 2012

Water boil alert remains in effect for the Godown Road area as a precautionary measure due to a main water break repair made precautionary measure due to a main water break repair made
yesterday. Alert will likely be lifted later today or tomorrow once lab testing is complete; please check our web site and local
media outlets for updates. For any questions, call Customer lab testing is complete; please check our web site and local
media outlets for updates. For any questions, call Customer Service at 645-8276.
http://www.utilities.columbus.gov/WorkArea/DownloadAsset. aspx $71 d=52508$
www.utilities.columbus.gov

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54 people saw this post

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Columbus Public Utilities shared a link.

Columithtypublic Utilithosgifaredtaink. (1) Event, Milestone + July 3, 2012

A big thank you to our dedicated city power crews!

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90 people saw this post

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#### Abstract

Columbus Public Utilities July 1, 2012 via mobile Repair crews from the Department of Public Utilities and American Electric Power have restored our water distribution system to where it is almost fully operational. However, as a precaution - to make certain all equipment continues running, to allow storage tanks to refill and to give our system a day to recover - we continue to ask our customers to suspend lawn watering until further notice. We will re-evaluate the situation Monday. We appreciate everyone's patience as well as the long hours of hard work invested by repair crews.


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60 people' saw this post

Activity
July 2012

## People Who Lilke This

## 13

People Talking About This
Visits
40

June 2012

## Like ' Comment ' Share

## 87 people saw this post

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Columbus Public Utilities shared a link.
June 21, 2012

Coming soon to a mailbox near you:
http://publicutilities.columbus.gov/content.aspx7id=52318


Drinking Water Report Shows Columbus Surpasses State \& Federal Minimum Standards for Quality - Publi publicutilities.columbus,gov

The recently released City of Columbus 2011 Drinking Water Consumer Confidence Report will
 Agency and The Ohio State University have allowed the Columbus Department of Public Utilities to move forward with plans to remove the Fifth Avenue lowhead dam and restore the natural flow of the Olentangy River through the university area. This $\$ 6$ ls million project, which includes natural channel design techniques and native planting along the Olentangy, would not be possible without more than $\$ 3.6$ million in grant funding from Ohio EPA and $\$ 2$ million from OSU.

Like ' Comment ' Share
43
146 people saw this post
Promote

Solumbus Public Utilities shared a link.
Our friends at the Solid Waste Authority of Central Ohio are sponsoring another mobile household hazardous waste collection site this Saturday, June 23 at 4252 Groves Road in Columbus, hours 8:00 a.m. to 2:00 p.m. See the full schedule att...See More

> http://www.swaco.org/Uploads/Documents/2012hhwFlyer2.p df
> www.swaco.org

Like • Comment • Share
2 i
85 people saw this post

Columbus Public Utilities
June 19, 2012

To all pet owners: due to an Increase in dog bites this year, you may be asked to control or temporarily confine your pet when our utility workers come to your homes. Pets tend to be territorial and protective of their owners and may become nervous or feel threatened when a stranger approaches. Our goal is to protect your pet as well as our workers. Please know that when a dog bite occurs we are required to report the incident to the Columbus Health Department, the Franklin County Department of Animal Care and Control, and to the Columbus Board of Health. Our utility workers are also trained and approved to carry pepper spray as a last resort if in fear of an attack. Thank you for your consideration.
Like • Comment • Share

103 people saw this post

Columbus Public Utilities shared Paving the Way: Central Ohio Road Construction and Salety's status. June 8, 2012

SR 315 will be closed in both directions between I-670 and I-70 on Saturday, June 9, from 6 a.m. to 9 p.m. for floodwall testing


Columbus Public Utilities
June 6, 2012

Please report Columbus streetlights in need of new bulbs or other service to 311 or 645-7627. Sometimes they are privately owned by AEP or others and are not the city's to maintain, but if they burn out and are city streetlights, if the public can report them it helps us get them back on as quickly as possible.

Like - Comment - Share
82 people saw this post


Sharing a little water history in the news today.


Columbus Mileposts | June 1, 1925:
Hot dam was welcome on blazing day
shar.es
With the temperature soaring to nearly 100 degrees and water use hitting

[^22]71 people saw this post



May 2012

Water conservation tip: a healthy lawn needs only $1^{\prime \prime}$ of water a week. For a free rain gauge to monitor weekly rainfall (or lack thereof lately 1), please call Customer Service at 645-8276 to request one.

Like ' Comment ' Share
71 people saw this post

Columbus Public Utilities shared a link, May 23, 2012

Looking for a volunteer activity to help keep the kids busy this summer? Our "No Dumping, Drains to Rivers" storm drain marking activity is very easy and helps raise awareness on protecting water quality.


Storm Drain Marker Program - Public Utilities, Columbus, Ohio utilities.columbus.gov

If you are interested in protecting our natural resources, participate in the "No Dumping, Drains to Rivers" storm drain marking project.

Like ' Comment ' Share
59 people saw this post

Columbus Public Utilities
May 16, 2012

Water main breaks can occur anytime, not just winter. Overall our breaks have been going down due to our replacement/rehab efforts, but we sometimes see them in the spring due to pressure shifts caused by seasonal hydrant flushing. If you see a suspected water break, please report it to 311 or 645-3111. After hours, you can dial our 24-hour line direct at 645-7788, which can also be accessed through 311 by following the prompts.

Like ' Comment ' Share

Columbus Public Utilitles
May 23, 2012

Filling a pool for this weekend? We have a chart to help you calculate how much it will cost, available off the web address below.
http://publicutilities.columbus.gov/DocListing.aspxpid=36841
Like ' Comment ' Share
70 people saw this post

Columbus Public Utilities shared a link. May 18, 2012

Just a reminder for Com-Til mulch fans that the product is no longer available for retail sale directly from our city compost facility. Below is a link to where you can find it and keep the beneficial product in your garden. Happy gardening!

Attention Valued Com-Til Customers - Public Utilities,
Columbus, Ohlo
publicutilities.columbus.gov
Com-Til is available at many conveniently located retailers Including:Jones Fuel, Ohio Mulch, Kurtz Brothers and Mr. Mulch.

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2012 Central Ohio Children's Water Festival (12 photos) 2012 Central Ohlo Children's Water Festival - at Ohio State Fairgrounds Expo Center.


Like • Comment ' Share • Tag Friends

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68 people saw this post

Activity
May 2012
People Who Like This


Columbus Public Utilities
May 3, 2012

Our customer information and billing system is currently unavailable. We hope to have it restored by the end of today, but for billing issues or scheduled service calls, It may be best to call back tomorrow. We apologize for any inconvenience. This will not affect emergency service requests like water breaks; please continue to report those as usual. For questions, please call Customer Service at 645-8276.

Like ' Comment ' Share
1

73 people saw this post

April 2012

Columbus Public Utilities shared a link. April 27, 2012

If you are going to COSI for their Earth Day event tomorrow (which will have a water focus this year due to their Water exhibit), please stop by our booth and pick up a free rain gauge! Our Watershed Rangers will have activities for kids also.

Columbus Public Utilities shared a link. April 25, 2012

The annual fire hydrant flushing season begins Monday. If you experience a temporary reduction in pressure or see some rusty water during it, here is some info on what to do as well as the schedule.


Columbus Public Utilities shared a link.
April 24, 2012

Columbus Government Television (CTV) has uploaded a video to their YouTube channel from the Thursday, April 12 event at the OARS project contruction site. This video makes a good companion to the project photo folder uploaded to this page Apfil 13.
http://www.youtube.com/watch? $\mathrm{V}=$ NojzndGPM5o


Press Conference: OARS Project Tour Aprll 2012

Mayor Michael B. Coleman, City Councilmember Eileen Y. Paley and Department of Public Utilltes Director Greg Davles joined other city leaders

Like ' Comment ' Share
63 people saw this post

Columbus Public Utilities shared a link via Mid-Ohio Regional P̈lanning Commission (MORPC).
April 19, 2012

Compost Bin E Rain Barrel Sale
www.morpc.org
Join us Saturday and SundayMay 5 \& 6, 201210 am-3 pmContact Brandi Whetstone at 614-233-4174 for more information or to volunteer at either event.

Like ' Comment ' Share
61 people saw this post

Columbus Public Utilities shared a link. April 18, 2012

A little Columbus water history in the news today.
Columbus Mileposts | April 18,
1853: Cholera, fires spur municipal
water system
www.dispatch.com
With fire and deadly dlsease frequent
visitors to Columbus residents, the City

Drug Disposal - National Take-Back Initiative www.deadiversion.usdoj.gov

Department of Justice Drug Enforcement Administration Office of Diversion Control

Like ' Comment • Share



The next Columbus City Council Community Meeting is set for Tuesday, April 10 at the Barnett Community Center, 1184 Barnett Road, 5:30-7:30 p.m. (*note: this meeting is rescheduled from its original date of April 3). These are excellent opportunities to meet Council representatives - including Councilmember Elleen Paley, Chair of the Public Utilities Committee - in an informal setting and talk about issues important to your neighborhood. Representatives from each department, including Public Utilities, will be on hand as well.

> Like • Comment • Share

51 people saw this post

Columbus Public Utilities shared a link.
March 19, 2012

As thoughts turn to gardening during this wonderful early spring we are experiencing, we wanted to post a reminder on the change in locations where the city's Com-Til mulching product will be available. More info is available at the link.


Attention Valued Com-Til Customers - Public Utilities, Columbus, Ohio publicutilities.columbus.gov

Com-Til is available at many conveniently located retailers including:Jones Fuel, Ohlo Mulch, Kurtz Brothers and Mr. Mulch.

Like ' Comment ' Share
53 people saw this post

Columbus Public Utilities shared a link.
March 13, 2012

Did you know it's Fix A Leak Week? EPA suggests we pledge to save water by fixing all leaks. To help you get started, here is the link to Columbus' Leak Detection Guide. For hard copies and other goodies like dye tablets, please call Customer Service at 645-8276.
http://publicutilities.columbus.gov/uploadedFiles/Public_Utilit| es/Document_Llbrary/Publications/Pow publicutilities.columbus.gov

Like ' Comment 'Share
50 people saw this post

Columbus Public Utilities shared a link via Columbus
City Council.
March 8, 2012

Columbus Public Utillies shared a link. Marchsefitig1: Photo / Video
13) Event, Milestone +

This is Spring Severe Weather Awareness Week, and we urge you to take part in the statewide tornado drill scheduled Wednesday morning - details below from Franklin County Emergency Management and Homeland Security. Preparation is your best chance to remain safe during severe weatherl

## http://www.franklincountyohio.gov/emahs



Emergency Management and Homeland Security www.franklincountyohio.gov

STATEWIDE TORNADO DRILL IS THIS WEDNESDAY AT 9:50 A.M. - NOT AT NOON; Part of Spring Severe Weather

Like ' Comment ' Share
57 people saw this post

Columbus Public Utillities shared Joe At TourismOhio's album.
March 15, 2012

One of our employees got the opportunity to preview this amazing exhibit that opens at COSI on Saturday. It is very educational and highly recommended for anyone interesteg in water - and since we all depend on it, aren't we all?

```
COSI - WATER (6 photos)
The stages of water - solid, liquid, gas
```



Columbus Public Utilities shared a link via Mayor Mike
Coleman.
March 8, 2012

## Like • Comment • Share

51 people saw this post


## People Who Like This



Frankin County Commissioners Invest In New Community Gardens - ColumbusUnderground.com www.columbusunderground.com

Like ' Comment ' Share
54 people saw this post



Sharing this community gardens grant opportunity that opens next week.

Mayor Michael B. Coleman, the Franklin County Commissioners and Columbus Bicentennial sponsor Fifth Third Bank have teamed up to offer grant funding (up to \$4000) for community gardens. Additionally, The Scotts Miracle-Gro Company has partnered to supplement grant awards with product donations. Grant applications will become available online at the Columbus Foundation website Monday, February 27 and will remain available until March 16, 2011. An information session will be
Columbus Publiç Utilitesernehechapledple, places and things
Fabruary-23, 2012

Federal poverty numbers were just adjusted. If you know of anyone who applied for a low income or senior discount and did not qualify because they made slightly too much income, please encourage them to review the numbers to see if they qualify now.
http://publicutilities.columbus.gov/content.aspx?id=40925


Utility Discount Programs - Public Utilities, Columbus, Ohio
publicutilities.columbus.gov
Low Income - Single Family PropertyPrograma de Descuento por Bajo Ingreso para Cargos de Agua y Cloaca Low Income Discount Application in Spanish

Like ' Comment ' Share
56 people saw this post

Columbus Public Utilities shared a link. February 15, 2012

Back in November we shared how Columbus Public Utilities is working with Franklin County Emergency Management and Homeland Security to establish Operation Flood Fight, recruiting volunteers to help fill sandbags in the event of widespread f.,.see More


Emergency Management and
Homeland Security www.franklincountyohio.gov

Operation Flood Fight, Posted
2/14/12Volunteers needed: Learn to sandbag in a catastrophic flood. (Click

Like ' Comment ' Share
44 people saw this post


Columbus Public Utilities shared Columbus GreenSpot's status.
February 9, 2012

Save the date! The annual GreenSpot celebration and Mayor Coleman's presentation of the GreenSpotLight awards will be held in conjunction with Cocktails at the Conservatory on March 8. Stay tuned for more details.

```
Like ' Comment ' Share
28 people saw this post
```

Like - Comment ' Share
45 people saw this post

Columbus Public Utilities shared a link.
February 3, 2012

Have you RSVP'd yet for the State of the City Address?


The 2012 State of the City Address - Office of the
Mayor, Columbus, Ohio
mayor.columbus.gov
RSVP by February 24th By phone: (614) 645-RSVP, or email: MayorsRSVP@Columbus.govComplimentary Parking: Columbus Commons Parking Garages 191 South

[^23]Activity
February 2012

# Green Spot E inesses <br> Mandatory Requirements to Comply With City Code and the City＇s MS4 NPDES Permit 

| Business | Clean Outcloor Areas with a Broom and／or Damp Mop Instead of a Hose． | Keep Receiving Areas and Dumpsters Clear of Literer． | Do not Hose off or Wash Cars， Equipment，Floor Mats，or Other Items Where Runof̂ Water Flows Into the Storm Drain． |
| :---: | :---: | :---: | :---: |
| Albert Chapman Elementary School |  |  |  |
| 8450 Sawmill Road | V | 回 | V |
| Ann Simpson Davis Middle School |  |  |  |
| 2400 Sutter Parkway | 0 | 回 | 回 |
| Baker Creative |  |  |  |
| 386 Main Street | V | $\square$ | － |
| Battelle Memorial Institute |  |  |  |
| 505 King Ave | 回 | 回 | $\square$ |
| Bennett Insurance Agency Lic |  |  |  |
| 700 South High Street | 回 | $\square$ | V |
| Bethel Lutheran Church |  |  |  |
| 4501 Hoover Road | $\square$ | 匈 | 回 |
| Blacklick Woods Metro Park |  |  |  |
| 6975 E．Livingston Ave． | $\square$ | 匃 | $\square$ |
| City of Columbus Department of Public Utilities |  |  |  |
| 910 Dublin Rd | V | 匃 | V |
| Clean Fuels Ohio |  |  |  |
| 530 W Spring St Ste 250 | $\square$ | $\square$ | $\square$ |
| Columbus Furniture Revival，LLC |  |  |  |
| 804 S．Pearl St． | 回 | $\square$ | V |
| Columbus Labor Solutions |  |  |  |
| 3230 N．High Street | － | $\square$ | $\square$ |
| Daniel Wright Elementary |  |  |  |
| 2335 West Case Road | 回 | 因 | V |
| Deer Run Elementary School |  |  | － |
| 8815 Avery Road | $\checkmark$ | 匈 | 匀－ |


| Business | Clean Outdoor Areas with a Broom and／or Damp Mop Instead of a Hose． | Keep Receiving Areas and Dumpsters Clear of Litter： | Do not Hose off or Wash Cars， Equipment，Floor Mats，or Other Items Where Runoff Water Flows Into the Storm Drain． |
| :---: | :---: | :---: | :---: |
| Dr Pepper Snapple Group |  |  |  |
| 950 Stelzer Rd | V | V | 回 |
| Dublin City Schools | － |  |  |
| 7030 Coffman Rd | V | 回 | 0 |
| Dublin Coffman High School |  |  |  |
| 5780 Coffman Road | 回 | 回 | V |
| Dublin Jerome High School |  |  |  |
| 8300 Hyland Croy Road | 回 | 回 | V |
| Dublin Scioto High School |  |  |  |
| 4000 Hard Road | 回 | 回 | V |
| Eli Pinney Elementary School |  |  |  |
| 9989 Concord Road | － | 回 | V |
| Emma Bailey Elementary School |  |  |  |
| 4900 Brandonway Drive | ， | － | V |
| estem Middle at Baldwin Road |  |  |  |
| 2300 Baldwin Road | V | V | 0 |
| FernBird |  |  |  |
| 3337 N High St | ， | $\square$ | $\square$ |
| Fine Citizens |  |  |  |
| 1020 Dennison Ave，Suite 301 | $\square$ | $\square$ | V |
| Garrison and Associates Inc |  | － |  |
| 4701 Olentangy River Rd \＃201 | v | 回 | $\square$ |
| Garrison and Associates，Inc． |  |  |  |
| 4920 Reed Road／Suite B | V | 回 | $\square$ |
| Gerber，LLC |  |  |  |
| 121 E．Nationwide Blvd． | $\square$ | $\square$ | $\square$ |
| Glacier Ridge Elementary School |  |  |  |
| 7175 Glacier Ridge Road | V | Q | D |
| Godman Guild Association |  |  |  |
| 303 E．6th Ave | Q | 回 | 回 |

Clean Outt Areas with Keep Receiving Areas Do not Hose off or Wash Car: a Broom ans / or Damp and Dumpsters Clear Equipment, Floor Mats, or Other Mop Instead of a Hose. of Litter. lems Where Runoff Water Flows Into the Storm Drain.


Business
 Equipment, Floor Mats, or Otic. Into the Storm Drain.

59 Records From 01-Jan-2012 Through 31-Dec-2012

## Green Spot L sinesses <br> Stormwater Benefits from Landscaping Commitments

|  | Install a cistern or rain barrel to catch rainwater, and use it to water landscaped areas | Install a <br> rain <br> garden | Redirect downspouts towards landscaped areas where possible | Remove hardscape and install permeable paving, such as porous concrete or porous pavers. |
| :---: | :---: | :---: | :---: | :---: |
| Albert Chapman Elementary School |  |  |  |  |
| 8450 Sawmill Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Ann Simpson Davis Middle School |  |  |  |  |
| 2400 Sutter Parkway | V | $\square$ | $\square$ | $\square$ |
| Baker Creative |  |  |  |  |
| 386 Main Street | $\square$ | $\square$ | $\checkmark$ | $\square$ |
| Battelle Memorial Institute |  |  |  |  |
| 505 King Ave | $\square$ | $\square$ | $\square$ | $\square$ |
| Bennett Insurance Agency LLC |  |  |  |  |
| 700 South High Street | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Bethel Lutheran Church |  |  |  |  |
| 4501 Hoover Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Blacklick Woods Metro Park |  |  |  |  |
| 6975 E. Livingston Ave. | $\checkmark$ | $\checkmark$ | $\square$ | $\square$ |
| City of Columbus Department of Public Utilities |  |  |  |  |
| 910 Dublin Rd | $\checkmark$ | $\square$ | $\square$ | $\checkmark$ |
| Clean Fuels Ohio |  |  |  |  |
| 530 W Spring St Ste 250 | $\square$ | $\square$ | $\square$ | $\square$ |
| Columbus Furniture Revival, LLC |  |  |  |  |
| 804 S. Pearl St. | $\square$ | $\square$ | $\square$ | $\square$ |
| Columbus Labor Solutions |  |  |  |  |
| 3230 N. High Street | $\square$ | $\square$ | $\square$ | $\square$ |
| Daniel Wright Elementary |  |  |  |  |
| 2335 West Case Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Deer Run Elementary School |  |  |  |  |
| 8815 Avery Road | $\square$ | $\nabla$ | $\square$ | $\square$ |

Install a cistern or rain Install a Redirect downspouts Remove hardscape and barrel to catch rainwater, and use it to garden areas where possible such as porous concrete or water landscaped areas
porous pavers.

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| :---: | :---: | :---: | :---: | :---: |
| Dr Pepper Snapple Group |  |  |  |  |
| 950 Stelzer Rd | $\checkmark$ | $\square$ | $\checkmark$ | $\square$ |
| Dublin Clty Schools |  |  |  |  |
| 7030 Coffman Rd | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Dublin Coffman High School |  |  |  |  |
| 6780 Coffman Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Dublin Jerome High School |  |  |  |  |
| 8300 Hyland Croy Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Dublin Scioto High School |  |  |  |  |
| 4000 Hard Road | V | $\square$ | $\square$ | $\square$ |
| Eli Pinney Elementary School |  |  |  |  |
| 9989 Concord Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Emma Bailey Elementary School |  |  |  |  |
| 4900 Brandonway Drive | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| eStem Middle at Baldwin Road |  |  |  |  |
| 2300 Baldwin Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| FernBird |  |  |  |  |
| 3337 N High St | $\square$ | $\square$ | $\square$ | $\square$ |
| Fine Citizens |  |  |  |  |
| 1020 Dennison Ave, Suite 301 | $\square$ | $\square$ | $\square$ | $\square$ |
| Garrison and Associates Inc |  |  |  |  |
| 4701 Olentangy River Rd \#201 | $\square$ | $\square$ | $\square$ | $\square$ |
| Garrison and Associates, Inc. |  |  |  |  |
| 4920 Reed Road / Suite B | $\square$ | $\square$ | $\square$ | $\square$ |
| Gerber, LLC |  |  |  |  |
| 121 E . Nationwide Blvd. | $\square$ | $\square$ | $\square$ | $\square$ |
| Glacier Ridge Elementary School |  |  |  |  |
| 7175 Glacier Ridge Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Godman Guild Association |  |  |  |  |
| 303 E .6 th Ave | $\checkmark$ | $\square$ | $\square$ | $\square$ |


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| 4900 Brandonway Drive | $\checkmark$ | $\square$ | $\square$ | $\square$ |
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| 303 E .6 th Ave | $\checkmark$ | $\square$ | $\square$ | $\square$ |


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| Garrison and Associates Inc |  |  |  |  |
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| Garrison and Associates, Inc. |  |  |  |  |
| 4920 Reed Road / Suite B | $\square$ | $\square$ | $\square$ | $\square$ |
| Gerber, LLC |  |  |  |  |
| 121 E. Nationwide Blvd. | $\square$ | $\square$ | $\square$ | $\square$ |
| Glacier Ridge Elementary School |  |  |  |  |
| 7175 Glacier Ridge Road | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Godman Guild Association |  |  |  |  |
| 303 E. 6th Ave | $\checkmark$ | $\square$ | $\square$ | $\square$ |


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| Dr Pepper Snapple Group |  |  |  |  |
| 950 Stelzer Rd | $\checkmark$ | $\square$ | $\checkmark$ | $\square$ |
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| 4920 Reed Road / Suite B | $\square$ | $\square$ | $\square$ | $\square$ |
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Install a irn or rain Install a Redirect downspouts Remove hardscape a barrel to vatch rain towards landscaped install permeable paving, rainwater, and use it to garden areas where possible such as porous concrete or water landscaped areas porous pavers.

|  | water landscaped areas |  | porous pavers. |  |
| :---: | :---: | :---: | :---: | :---: |
| Green Roots, LLC 8114 Reynoldswood Dr. | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Grove Overhead Door |  |  |  |  |
| 1688 Case Rd | $\nabla$ | $\square$ | $\square$ | $\square$ |
| Hazels House of Hope |  |  |  |  |
| 477 E Morrill Ave | V | $\square$ | V | $\square$ |
| Henry Karrer Middle School |  |  |  |  |
| 7245 Tullymore Drive | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Hispanic Chamber of Columbus |  |  |  |  |
| 773 East Long Street | $\square$ | $\square$ | $\square$ | $\square$ |
| Indian Run Elementary School |  |  |  |  |
| 80 West Bridge Street | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| John Sells Middle School |  |  |  |  |
| 150 West Bridge Street | $\nabla$ | $\square$ | $\square$ | $\square$ |
| Kaufman Development |  |  |  |  |
| 30 Warren St | $\square$ | $\square$ | $\square$ | $\square$ |
| Matrka Deconstruction |  |  |  |  |
| 7178 scioto rd | $\square$ | $\square$ | $\square$ | $\square$ |
| McCloy Financial Services |  |  |  |  |
| 921 Chatham Lane, Suite 300 | $\square$ | $\square$ | $\square$ | $\square$ |
| MWH Global |  |  |  |  |
| 1801 Watermark Dr. Ste 220 | $\square$ | $\square$ | $\square$ | $\square$ |
| Oakwood Management |  |  |  |  |
| 6950-A Americana Parkway | $\square$ | $\square$ | $\square$ | $\square$ |
| Olde Sawmill Elementary School |  |  |  |  |
| 2485 Olde Sawmill Blvd | V | $\square$ | $\square$ | $\square$ |
| Oxford Training and Enrichment Center |  |  |  |  |
| 6065 Glick Rd. | $\square$ | $\square$ | $\square$ | $\square$ |
| Re Work Concepts |  |  |  |  |
| 6447 Sharon Woods Blvd | $\square$ | $\square$ | $\square$ | $\square$ |

Install a cistern or rain Install a Redirect downspouts Remove hardscape and barrel to catch rain towards landscaped install permeable paving, rainwater, and use it to garden areas where possible such as porous concrete or water landscaped areas porous pavers.

## Reddy or Knot Design

2756 Edgewood Road
Restoration Solutions LLC

| 7529 Mountain Park Dr | $\square$ | $\square$ | $\square$ | $\square$ |
| :---: | :---: | :---: | :---: | :---: |
| Riverside Elementary School |  |  |  |  |
| 3260 Riverside Green Drive | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Scottish Corners Elementary School |  |  |  |  |
| 5950 Sells Mills Drive | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| Select Services Property Solutions, LLC |  |  |  |  |
| 3080 Scioto Darby Executive Ct. | $\square$ | $\square$ | $\square$ | $\square$ |
| Sharon Woods Metro Park |  |  |  |  |
| 6911 Cleveland Ave. | $\checkmark$ | $\square$ | $\square$ | $\square$ |
| ShredMark, Ltd. |  |  |  |  |
| 790 East Markison Ave. | $\square$ | $\square$ | $\square$ | $\square$ |
| T\&M Associates |  |  |  |  |
| 100 East Campus View Blvd., Suite 250 | $\square$ | $\square$ | $\square$ | $\square$ |
| The Dawes Arboretum |  |  |  |  |
| 7770 Jacksontown Road | $\checkmark$ | $\square$ | $\nabla$ | $\square$ |
| The Lamp Shade |  |  |  |  |
| 990 N. High St. | $\square$ | $\square$ | $\square$ | $\square$ |
| TrashCab LLC |  |  |  |  |
| 955 Checkrein Ave | $\square$ | $\square$ | $\square$ | $\square$ |
| WastePoint, Inc. |  |  |  |  |
| P.O. Box 91231 | $\square$ | $\square$ | $\square$ | $\square$ |
| Weldon |  |  |  |  |
| 3656 Paragon Drive | $\square$ | $\square$ | $\checkmark$ | $\square$ |
| Williams Creek Consulting, Inc. |  |  |  |  |
| 247 East Livingston Ave, Suite B | $\square$ | $\square$ | $\square$ | $\square$ |
| Williard Grizzell Middle School |  |  |  |  |
| 8705 Avery Road | V | $\square$ | $\square$ | $\square$ |

Install: arn or rain Install a Redirect downspouts Remove hardscape a barrel to tatch rain towards landscaped install permeable paving, rainwater, and use it to garden areas where possible such as porous concrete or water landscaped areas porous pavers.

59 Records From 01-Jan-2012 Through 31-Dec-2012

Zonders, George J.

## From:

Sent:
To:
Subject:

City Council
Wednesday, January 04, 2012 5:02 PM
*Columbus Email Users; *Columbus Email (Muni Court Notifications); *Columbus Email (PoliceNet notifications)
2012 City Council Meeting Schedule (subject to change)

## TENTATIVE

## SCHEDULE OF CITY COUNCIL MEETINGS FOR 2012

| 1/03/12 | Reorganization Mtg.\#1 15:00 p.m. (NO LEGISLATION) |
| :---: | :---: |
| 1/09/12 | Reg.Mtg.\#2, 5:00 p.m. |
| 1/16/12 | NO MEETING - MARTIN LUTHER KING DAY |
| 1/23/12 | Reg.Mtg.\#3 \& 4, 5:00 \& 6:30 p.m. |
| 1/30/12 | Reg.Mtg.\#5 \& 6, 5:00 \& 6:30 p.m. |
| 2/06/12 | Reg.Mtg.\#7 \& 8, 5:00 \& 6:30 p.m. |
| 2/13/12 | Reg.Mtg.\#9 \& 10, 5:00 \& 6:30 p.m. |
| 2/20/12 | NO MEETING - PRESIDENT'S DAY |
| 2/27/12 | Reg.Mtg.\#11 \& 12, 5:00 \& 6:30 p.m. |
| 3/05/12 | Reg.Mtg.\#13 \& 14, 5:00 \& 6:30 p.m. |
| 3/12/12 | Reg.Mtg.\#15 \& 16, 5:00 \& 6:30 p.m. |
| 3/19/12 | NO MEETING |
| 3/26/12 | Reg.Mtg.\#17 \& 18, 5:00 \& 6:30 p.m. |
| 4/02/12 | Reg.Mtg.\#19 \& 20, 5:00 \& 6:30 p.m. |
| 4/09/12 | NO MEETING |
| 4/16/12 | Reg.Mtg.\#21 \& 22, 5:00 \& 6:30 p.m. |
| 4/23/12 | Reg.Mtg.\#23 \& 24, 5:00 \& 6:30 p.m. |
| 4/30/12 | Reg.Mtg.\#25 \& 26, 5:00 \& 6:30 p.m. |
| 5/07/12 | Reg.Mtg.\#27 \& 28, 5:00 \& 6:30 p.m. |
| 5/14/12 | Reg.Mtg.\#29 \& 30, 5:00 \& 6:30 p.m. |
| 5/21/12 | Reg.Mtg.\#31 \& 32, 5:00 \& 6:30 p.m. |
| 5/28/12 | NO MEETING - MEMORIAL DAY. |
| 6/04/12 | Reg.Mtg.\#33 \& 34, 5:00 \& 6:30 p.m. |
| 6/11/12 | Reg.Mtg.\#35 \& 36, 5:00 \& 6:30 p.m. |
| 6/18/12 | Reg.Mtg.\#37 \& 38, 5:00 \& 6:30 p.m. |
| 6/25/12 | Reg.Mtg.\#39 \& 40, 5:00 \& 6:30 p.m. |
| 7/02/12 | NO MEETING |
| 7/09/12 | Reg.Mtg.\#41 \& 42, 5:00 \& 6:30 p.m. |
| 7/16/12 | Reg.Mtg.\#43 \& 44, 5:00 \& 6:30 p.m. |
| 7/23/12 | Reg.Mtg.\#45 \& 46, 5:00 \& 6:30 p.m. |
| 7/30/12 | Reg.Mtg.\#47 \& 48, 5:00 \& 6:30 p.m. |
| AUGUST-RECESS |  |
| 9/03/12 | NO MEETING - LABOR DAY |
| 9/10/12 | Reg.Mtg.\#49 \& 50, 5:00 \& 6:30 p.m. |
| 9/17/12 | NO MEETING - ROSH HASHANAH |
| 9/24/12 | Reg.Mtg.\#51 \& 52, 5:00 \& 6:30 p.m. |
| 10/01/12 | Reg.Mtg.\#53 \& 54, 5:00 \& 6:30 p.m. |
| 10/08/12 | NO MEETING - COLUMBUS DAY |
| 10/15/12 | Reg.Mtg.\#55 \& 56, 5:00 \& 6:30 p.m. |
| 10/22/12 | Reg.Mtg.\#57 \& 58, 5:00 \& 6:30 p.m. |
| 10/29/12 | Reg.Mtg.\#59 \& 60, 5:00 \& 6:30 p.m. |
| 11/05/12 | Reg.Mtg.\#61 \& 62, 5:00 \& 6:30 p.m. |
| 11/12/12 | Reg.Mtg.\#63\& 64, 5:00 \& 6:30 p.m. |
| 11/19/12 | Reg.Mtg.\#65 \& 66, 5:00 \& 6:30 p.m. |
| 11/26/12 | NO MEETING |
| 12/03/12 | Reg.Mtg.\#67 \& 68, 5:00 \& 6:30 p.m. |
| 12/10/12 | Reg.Mtg.\#69 \& 70, 5:00 \& 6:30 p.m. |

12/17/12
12/24/12 12/31/12

Reg.Mtg.\#71 \& 72, 5:00 \& 6:30 p.m. NO MEETING - HOLIDAY RECESS NO MEETING - HOLIDAY RECESS
**SUBJECT TO CHANGE**

## Addresses of Home Septic Systems

## Known to Discharge to

 the City of Columbus MS4 December 31, 2012| ADDRESS | SIZE (in.) | MATERIAL | CONFIGUTATION |
| :---: | :---: | :---: | :---: |
| 1001 MEEKLYN DR | 18 | CONCRETE | CIRCULAR |
| 1114 WOODLAND AVE | 60 | CONCRETE | CIRCULAR |
| 1181 REFUGEE RD | 12 | CLAY | CIRCULAR |
| 1271 SOUTHPORT CIR | 12 | CONCRETE | CIRCULAR |
| 1290 NORTHPORT CIR | 18 | CLAY | CIRCULAR |
| 1301 SOUTHPORT DR | 12 | CMP | CIRCULAR |
| 1315 SOUTHPORT DR | 12 | HDPE | CIRCULAR |
| 1328 NORTHPORT DR | 12 | CLAY | CIRCULAR |
| 1355 SOUTHPORT DR | 12 | CONCRETE | CIRCULAR |
| 1379 SOUTHPORT DR | 12 | CONCRETE | CIRCULAR |
| 1388 PORTAGE DR | 8 | CLAY | CIRCULAR |
| 1390 SOUTHPORT DR | 10 | CLAY | CIRCULAR |
| 1400 NORTHPORT DR | 12 | CLAY | CIRCULAR |
| 1575 WEST CASE RD | 0 |  | CHANNEL |
| 1582 STUDER AVE | 12 | CONCRETE | CIRCULAR |
| 1584 ZETTLER RD | 12 | CONCRETE | CIRCULAR |
| 1593 WEST CASE RD | 0 |  | CHANNEL |
| 1712 BARNETT RD | 24 | CONCRETE | CIRCULAR |
| 1715 E 24TH AVE | 12 | CONCRETE | CIRCULAR |
| 1828 SNOUFFER RD | 15 | CLAY | CIRCULAR |
| 1855 SNOUFFER RD | 15 | HDPE | CIRCULAR |
| 1865 SNOUFFER RD | 10 | CLAY | CIRCULAR |
| 1867 SNOUFFER RD | 15 | HDPE | CIRCULAR |
| 1871 SNOUFFER RD | 15 | HDPE | CIRCULAR |
| 1891 SNOUFFER RD | 12 | HDPE | CIRCULAR |
| 1907 SNOUFFER RD | 12 | HDPE | CIRCULAR |
| 1920 WILLIAMS RD | 12 | CONCRETE | CIRCULAR |
| 1992 BROWN RD | 10 | PVC | CIRCULAR |
| 2066 PARKWOOD AVE | 48 | CONCRETE | CIRCULAR |
| 2101 WOODWARD AVE | 8 | CLAY | CIRCULAR |
| 2155 DUBLIN RD | 10 | CMP | CIRCULAR |
| 2206 WOODWARD AVE | 24 | CONCRETE | CIRCULAR |
| 2221 WATKINS RD | 8 | CLAY | CIRCULAR |
| 2225 MCKINLEY AVE | 18 | CONCRETE | CIRCULAR |
| 2300 SUNBURY RD | 18 | CONCRETE | CIRCULAR |
| 2322 SUNBURY RD | 12 | CONCRETE | CIRCULAR |
| 2363 STRIMPLE AVE | 24 | CONCRETE | CIRCULAR |
| 2374 SUNBURY RD | 12 | CONCRETE | CIRCULAR |
| 2385 STELZER RD | 21 | CONCRETE | CIRCULAR |
| 2390 KILBOURNE AVE | 24 | CONCRETE | CIRCULAR |
| 2445 BROOKLYN RD | 15 | CONCRETE | CIRCULAR |
| 2460 N CASSADY AVE | 12 | CONCRETE | CIRCULAR |
| 2590 BRIGGS RD | 12 | PVC | CIRCULAR |
| 2626 FISHER RD | 24 | CONCRETE | CIRCULAR |
| 2640 MCCUTCHEON RD | 8 | CLAY | CIRCULAR |
| 2646 MCCUTCHEON RD | 8 | CLAY | CIRCULAR |
| 2654 MCCUTCHEON RD | 8 | CLAY | CIRCULAR |
| 2665 SPANGLER RD | 24 | CONCRETE | CIRCULAR |

Addresses of Home Septic Systems
Known to Discharge to the City of Columbus MS4

December 31, 2012

| ADDRESS | SIZE (in.) | MATERIAL | CONFIGUTATION |
| :---: | :---: | :---: | :---: |
| 2688 MCCUTCHEON RD | 8 | CLAY | CIRCULAR |
| 2699 S HIGH ST | 24 | CONCRETE | CIRCULAR |
| 2700 AGLER RD | 8 | CONCRETE | CIRCULAR |
| 2710 MCCUTCHEON RD | 8 | CLAY | CIRCULAR |
| 2862 JOHNSTOWN RD (2) | 12 | CONCRETE | CIRCULAR |
| 2878 INNIS RD | 15 | CLAY | CIRCULAR |
| 2900 INNIS RD | 18 | CONCRETE | CIRCULAR |
| 3078 LEWIS RD | 30 | CONCRETE | CIRCULAR |
| 3215 E DESHLER AVE | 42 | CONCRETE | CIRCULAR |
| 3237 E DESHLER AVE | 42 | CONCRETE | CIRCULAR |
| 3300 LOCKBOURNE RD | 60 | CONCRETE | CIRCULAR |
| 3375 BRIGGS RD | 12 | HDPE | CIRCULAR |
| 3399 BRIGGS RD | 10 | HDPE | CIRCULAR |
| 3452 PETZINGER RD | 12 | CONCRETE | CIRCULAR |
| 3458 BEXVIE AVE | 30 | CONCRETE | CIRCULAR |
| 3555 EL PASO DR | 8 | CONCRETE | CIRCULAR |
| 3599 REFUGEE RD | 42 | CONCRETE | CIRCULAR |
| 3600 FERRELL PL | 12 | CONCRETE | CIRCULAR |
| 3600 SKYLINE DR | 0 |  | CHANNEL |
| 3625 SKYLINE DR | 12 | CONCRETE | CIRCULAR |
| 3677 SNOUFFER RD | 0 |  | CHANNEL |
| 3712 BEHM RD | 8 | CONCRETE | CIRCULAR |
| 3750 BEHM RD | 8 | CLAY | CIRCULAR |
| 3992 SUNBURY RD | 10 | CONCRETE | CIRCULAR |
| 406-420 MORRISON RD | 0 |  | CHANNEL |
| 4495 CLEVELAND AVE | 24 | CONCRETE | CIRCULAR |
| 4624 GENDER RD | 12 | CONCRETE | CIRCULAR |
| 4699 TRABUE RD | 0 |  | CHANNEL |
| 4820 KENNY RD | 60 | CONCRETE | CIRCULAR |
| 4832 KENNY RD | 60 | CONCRETE | CIRCULAR |
| 4927 POSTLEWAITE RD | 12 | CONCRETE | CIRCULAR |
| 5132 N HIGH ST | 21 | CONCRETE | CIRCULAR |
| 6033 REFUGEE RD | 6 | PVC | CIRCULAR |
| 6700 SKYLINE DR | 6 | CLAY | CIRCULAR |
| 6723 SKYLINE DR | 15 | CONCRETE | CIRCULAR |
| 6788 SKYLINE DR | 12 | CLAY | CIRCULAR |
| 6847 SMOKY ROW RD | 24 | CONCRETE | CIRCULAR |
| 6883 LINWORTHRD | 24 | CMP | CIRCULAR |
| 885 MEEKLYNN DR | 8 | PVC | CIRCULAR |
| 945 SAFIN RD | 10 | CONCRETE | CIRCULAR |
| 949 MEEKLYNN DR | 12 | CONCRETE | CIRCULAR |
| 975 SAFIN RD | , | CLAY | CIRCULAR |

City of -ulumbus
Stormwater Water Management Program
2012 Employee Training Summary

| Date(s) | Sponsor | Name of Class / Description | No. of City Attendees | Relevant <br> Program <br> Element* |
| :---: | :---: | :---: | :---: | :---: |
| 1/20/2012 | Forrester University | 5 Steps to Creating a Successful Stormwater Public Outreach Campaign | 1 | PE, PI |
| 2/8/2012 | Malcolm Pirnie | Unconventional Oil and Gas Production Water Management | 1 | IDDE |
| 2/9/2012 | Citywide Office of Training and Development | Citywide Orientation | 43 | GH |
| 2/14/2012 | Columbus Stormwater Section Internal Training | In-house sampling training | 4 | IDDE |
| 2/16/2012 | Forester University - Webcast Series | ABCs of BMPs: Buttoning Up Large | 1 |  |
| 2/24/12 | Ohio Water Environment Association | Nutrient Standards - Where Will They Land? | 1 | PD |
| 2/28/2012 | Franklin Soil and Water Conservation District | Central Ohio Stormwater and Erosion Control Expo | 10 | CP, PC |
| 2/28/12 | Recreation and Parks Dept., Maintenance/Forestry Divisions | SWPPP Training at 11 city-operated park maintenance facilities and 6 city-operated golf courses | 76 | GH |
| 03/01/12 | Ohio Water Environment Association | 2012 Government Affairs Workshop | 1 | PE |
| $\begin{aligned} & 3 / 14 / 2012 \\ & 3 / 15 / 2012 \end{aligned}$ | Ohio County Engineers Association | Storm Water Management and Drainage Conference and Trade Show | 3 | CP, PC |
| 3/21/2012 | Storm Water Solutions virtual EXPO | BMPs - BEST MANAGEMENT Practices Moderated Discussion Session | 4 | PC |
| 3/21/2012 | Storm Water Solutions virtual EXPO | LOW IMPACT DEVELOPMENT - <br> Moderated Discussion Session | 4 | PC |
| 3/21/2012 | Storm Water Solutions virtual EXPO | Storm Water Post-Construction BMP Evaluation | 4 | PC |

City of Columbus
Stormwater Water Management Program
2012 Employee Training Summary

| Date(s) | Sponsor | Name of Class / Description | No. of City Attendees | Relevant <br> Program <br> Element* |
| :--- | :--- | :--- | :---: | :---: |
| $3 / 21 / 2012$ | Storm Water Solutions virtual <br> EXPO | TRACK-OUT: Constructions Most <br> Common \& Costly BMP Violation | 4 | CP, PC |
| $3 / 21 / 2012$ | Storm Water Solutions virtual <br> EXPO | Understanding EPA's NPDES MS4 Permit <br> Program | 5 | PC |
| $3 / 22 / 2012$ | KLEMA Environmental Solutions | Environmental Law Enforcement Workshop |  |  |

City os_umbus

## Stormwater Water Management Program

2012 Employee Training Summary

| Date(s) | Sponsor | Name of Class / Description | No. of City Attendees | Relevant <br> Program <br> Element* |
| :---: | :---: | :---: | :---: | :---: |
| 5/16/2012 | Contech | Erosion Control and Hard Armor Technical Seminar | 2 | CP |
| $\begin{aligned} & 5 / 31 / 2012, \\ & 6 / 14 / 2012 \end{aligned}$ | US EPA Stormwater Pollution Prevention Webinar Series | Stormwater, Coal-Tar Sealcoat, and Polycyclic Aromatic Hydrocarbons (PAHs) | 3 | IDDE, IF |
| 6/14/2012 | Citywide Office of Training and Development | Citywide Orientation | 44 | GH |
| 6/20/2012 | Columbus Stormwater Section Internal Training | In house sampling training | 4 | IDDE |
| 6/21/2012 | American Public Works Association | Pervious Pavement | 1 | PC |
| 6/28/2012 | Water \& Wastes Digest, Clean Water America Alliance | Philadelphia's "Green City, Clean Waters" <br> Program-Implementing The Nations Most <br> Comprehensive Green Stormwater | 1 | PC |
| 7/2/2012 | Fondreist, Inc. | YSI Multimeter Training | 6 | IDDE |
| 7/6/12 | Department of Finance, Fleet Maintenance Division | SWPPP Training for City Fleet Maintenance staff | 3 | GH |
| 7/10/2012 | U.S. EPA Watershed Academy Webcasts | USDA's National Water Quality Initiative | 1 | PE |
| 7/25/2012 | Ohio Water Environment Association | Thinking Outside the Pipe: Green Infrastructure on the Fresh Coast | 2 | PC |
| 8/3/2012 | Bunyan Industries | BIRD Pervious Pavement Sweeping Demo | 4 | PC |
| 8/9/2012 | Citywide Office of Training and Development | Citywide Orientation | 41 | GH |
| 8/22/2012 | American Water Works Association | Social Media Tools for Utilities | 1 | PE, PI |
| 8/23/2012 | Columbus Stormwater Section Internal Training | In house training - Wet Weather | 6 | WWM |

City of Columbus
Stormwater Water Management Program
2012 Employee Training Summary

| Date(s) | Sponsor | Name of Class / Description | No. of City Attendees | Relevant <br> Program <br> Element* |
| :--- | :--- | :--- | :--- | :--- |
| $9 / 5 / 2012$ | Water Environment Federation - <br> Webcast | Method Update Rule- What's New | 3 | WWM |
| $9 / 12 / 2012$ | City of Columbus, Department of <br> Public Utilities | Blogging, Content Curation and Online <br> Presence Best Practices | 1 | PE, PI |
| $09 / 19 / 12$ | Franklin Soil and Water <br> Conservation District | Get the Dirt Out of Stormwater | 1 | CP |
| $9 / 25 / 2012$ | KLEMA Environmental Solutions | Environmental Law Enforcement Training |  |  |

City or iumbus

## Stormwater Water Management Program

2012 Employee Training Summary

| Date(s) | Sponsor | Name of Class /Description | No. of City Attendees | Relevant <br> Program <br> Element* |
| :--- | :--- | :--- | :--- | :--- |
| $12 / 6 / 2012$ | Ohio Department of <br> Transportation, <br> Ohio Department of Natural <br> Resources | Runoff Reduction Method | PC |  |
| $12 / 13 / 2012$ | Citywide Office of Training and <br> Development | Citywide Orientation | PC | G3 |
| $12 / 20 / 2012$ | Columbus Stormwater Section - <br> Internal Training | In house sampling training | GH |  |
| $10 / 10 / 2012$ |  |  |  |  |
| $11 / 07 / 2012$ |  |  |  |  |
| $12 / 12 / 2012$ | National Association of Clean <br> Water Agencies | NACWA Webcast series for Various Social <br> Medias | P | PD |

City of Columbus
Stormwater Water Management Program 2012 Employee Training Summary

| Date(s) | Name of Class / Description | No. of City Attendees | Relevant <br> Program <br> Element* |
| :--- | :---: | :---: | :---: |
| *Program Element Legend: |  |  |  |
| PD - Program Development |  |  |  |
| PI - Public Involvement |  |  |  |
| IDDE - Illicit Discharge Detection/Elimination |  |  |  |
| PE - Public Education and Outreach |  |  |  |
| CP - Construction Program |  |  |  |
| PC - Post Construction |  |  |  |
| GH - Good Housekeeping |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0001 T0001 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0001 T0018 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0001 T0156 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0001 T0169 | 11/16/2012 | Clear | None | Clear | No | N/M | 7.8 | 13 | 0 | 0 | 0 | . 1 | . 25 |
| 0001 T 1343 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000172945 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0002 T 2570 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0002 T 2842 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0002 T 2843 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0002 T 2844 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0002 T3004 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000670026 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0006 T 0087$ | 9/7/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0006 T0090 | 9/7/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 000670099 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0006 T 0133$ | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0006 T0143 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000670152 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000670361 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0006 T 0362$ | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0006 T 0407$ | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000670489 | 3/28/2012 |  |  | , |  | 0 |  |  |  |  |  |  |  |
| $0006 T 0526$ | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0006 T 0546$ | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0006 T 1003$ | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0082 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0117 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0138 | 9/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970196 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970197 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970209 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970280 | 9/12/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0009 T0314 | 9/5/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 000970336 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\mathrm{OIL}$ SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0009 T0338 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0339 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970342 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0353 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0360 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0365 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970366 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0527 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0529 | 3/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0551 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970646 | 3/8/2012 |  |  |  | ? | 0 |  |  |  |  |  |  |  |
| 0009 T0872 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0889 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009T0898 | 9/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0009 T0904 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 000970952 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T 0068 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T 0119 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T 0150 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 001070271 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T0396 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T0397 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T0403 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T 0414 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0010 \mathrm{TO419}$ | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T 0466 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T 0467 | 11/5/2012 | Clear | None | Clear | No | N/M | 7.4 | 17 | 0 | 0 | 0 | 0 | 25 |
| 0010 T0599 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 001070705 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0010 T 0843 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0018 T 0729 | 4/12/2012 | Clear | None | Clear | No | . 15 | 6.9 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0018 T 1005 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 001970007 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0019 T 0169 | 4/12/2012 |  |  | - |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0019 T0317 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0020 T0018 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0020 T0022 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0021 T0410 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0127 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0134 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0332 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0343 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0360 | 6/5/2012 | Clear | None | Clear | No | N/M | 8.0 | 19 | 0 | 0 | 0 | 0 | . 25 |
| 0024 T0380 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0382 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0407 | 6/5/2012 | Clear | None | Clear | No | N/M | 7.9 | 20 | 0 | 0 | 0 | . 1 | . 0 |
| 0024 T0408 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0413 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0436 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0467 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0554 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0024 T0588 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0026 T0801 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0026 T0855 | 3/7/2012 | Clear | None | Clear | No | N/M | 8.2 | 10 | 0 | 0 | . 1 | . 1 | 0 |
| 0027T000A | 9/13/2012 | Clear | None | Clear | No | N/M | 7.4 | 21 | 0 | 0 | 0 | . 1 | 0 |
| 0027 T0242 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 T0261 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 T0275 | 9/13/2012 | Clear | None | Clear | No | N/M | 8 | 21 | 0 | 0 | 0 | 0 | 0 |
| 0027 T0298 | 9/17/2012 | Clear | None | Clear | No | . 1 | 7.4 | 17 | 0 | 0 | 0 | 0 | 0 |
| 0027 T0317 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 T0932 | 9/13/2012 | Clear | None | Clear | No | N/M | 7.2 | 20 | 0 | 0 | 0 | . 3 | 0 |
| 0027 T0980 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 T1054 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 T1236 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 T1345 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 71392 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0027 71403 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 002711484 | 9/13/2012 | Clear | None | Clear | No | N/M | 7.4 | 20 | 0 | 0 | 0 | . 1 | 0 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\text {J }}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0031 T0706 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 003170737 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0033 T0499 | 11/19/2012 | Cloudy | None | Cloudy | No | N/M | 8.3 | 11 | 0 | 0 | . 4 | . 4 | 0 |
| 0033 T0500 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0033 T0614 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0033 T1417 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0035 T0609 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0035 T 0844 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0035 T 0853 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0035 T 1046 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 003770357 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0037 T 0535 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0038 T0040 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0038 T0402 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0038 T0501 | 2/2/2012 | Clear | None | Clear | No | . 3 | 7.8 | 16 | 0 | 0 | 0 | . 01 | 0 |
| 0040 T0055 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0040 T0076 | 3/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0040 T0193 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0041 T0188 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T 0078 | 3/5/2012 | Clear | None | Clear | No | . 1 | 8.2 | 6 | 0 | 0 | 0 | 0 | 0 |
| 0042 T0096 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T0097 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T 0214 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T 0286 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T 0291 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T 0385 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T0486 | 3/5/2012 | Clear | None | Clear | No | . 4 | 7.9 | 6 | 0 | 0 | . 6 | 0 | 0 |
| 0042 T 0525 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0042 T0532 | 5/16/2012 | Clear | None | Clear | No | 1 | 8.1 | 16 | 0 | 0 | 0 | . 1 | 0 |
| $0043 T 0119$ | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0043 T 1057 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0043 T1283 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0043T1362 | 3/5/2012 | Clear | None | Clear | No | . 12 | 7.8 | 7 | 0 | 0 | 0 | 0 | . 25 |
| 0044 T0566 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{0}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0044T0659 | 3/5/2012 | Clear | None | Clear | No | N/M | 8.2 | 7 | 0 | 0 | 0 | 0 | . 25 |
| 0044 T0878 | 3/5/2012 | Clear | None | Clear | No | . 3 | 7.8 | 7 | 0 | 0 | 0 | . 6 | . 25 |
| $0044 T 1438$ | 3/5/2012 | Clear | None | Clear | No | . 26 | 7.9 | 8 | 0 | 0 | 0 | 0 | 0 |
| $0046 T 0339$ | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0046 T 0436$ | 3/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0046 T 0439$ | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0046 T 0440 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0046 T 0445$ | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0046 T 1019$ | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0048 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0054 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0066 | 6/5/2012 | Clear | None | Clear | No | N/M | 8.2 | 17 | 0 | 0 | 0 | . 1 | . 25 |
| 0048 T0237 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0254 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0260 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0338 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T 0361 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0371 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0400 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0445 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0048 T0526 | 6/14/2012 | Clear | None | Clear | No | . 1 | 7.9 | 18 | 0 | 0 | 0 | 0 | . 25 |
| 0049 T0365 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0049 T0377 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0049 T0379 | 9/24/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0049 T0389 | 9/24/2012 | Clear | None | Clear | No | . 37 | 7.6 | 19 | 0 | 0 | 0 | . 4 | 0 |
| 0049 T0510 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0051 T0548 | 3/7/2012 | Clear | None | Clear | No | N/M | 8.2 | 10 | 0 | 0 | 0 | . 1 | 0 |
| 0052 T0282 | 5/30/2012 | Clear | None | Clear | No | N/M | 7.2 | 21 | 0 | 0 | 0 | . 1 | 25 |
| 0052 T 0429 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0052 T 0437 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0052 T0438 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0052 T 4440 | 5/23/2012 | Clear | None | Clear | No | . 96 | 8.0 | 18 | 0 | 0 | 0 | . 8 | 0 |
| 0052 T 0454 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0052 T 0560 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY |  | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | $\mathrm{mg} / \mathrm{L}$ | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0052 T 1000 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0052 T 1010 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0052 T 1222 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0055 T0468 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0055 T 1056$ | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0055 T1742 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0056 T 0177$ | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0056 T 0179$ | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0260 | 8/6/2012 | Clear | None | Clear | No | N/M | 7.6 | 20 | 0 | 0 | 0 | . 4 | . 25 |
| 0056 T0262 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0279 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0282 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0310 | - 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0328 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T 0344 | 2/23/2012 | Clear | None | Clear | No | . 1 | 7.9 | 6 | 0 | 0 | 0 | . 1 | 0 |
| 0056 T0390 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0440 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0525 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0549 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T0565 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0056 T 0660 | 8/6/2012 | Clear | None | Clear | No | . 18 | 8.0 | 24 | 0 | 0 | . 4 | 0 | 0 |
| 0056 T0684 | 2/23/2012 | Clear | None | Clear | No | . 95 | 8.0 | 7 | 0 | 0 | . 6 | 0 | . 25 |
| 005770022 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0057 T0031 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770096 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770192 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770197 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770205 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770209 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770401 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770420 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770425 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005770450 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0057 T 0635 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\mathrm{OIL}$ SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 005770713 | 8/21/2012 |  |  |  |  | 0 |  |  |  | . |  |  |  |
| 0058 T0138 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0152 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T 0203 | 9/17/2012 | Clear | None | Clear | No | . 1 | 8.1 | 20 | 0 | 0 | . 1 | . 1 | . 25 |
| 0058 T0273 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0320 | 2/7/2012 | Clear | None | Clear | No | . 6 | 7.8 | 11 | 0 | 0 | 0 | . 01 | 0 |
| 0058 T0328 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T 0337 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0342 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0349 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0469 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0473 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0498 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0513 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0514 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0539 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0541 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0058 T0659 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0059 T0054 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0059 T0055 | 9/7/2012 | Clear | None | Clear | No | N/M | 7.7 | 22 | 0 | 0 | 0 | . 2 | 0 |
| 0059 T0108 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005970209 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0059 T0214 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 005970223 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0059 T0229 | 2/2/2012 | Clear | None | Clear | No | . 3 | 7.8 | 15 | 0 | 0 | 0 | 0 | 0 |
| 0059 T0247 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0059 T0380 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0060 T 0062$ | 9/7/2012 | Clear | None | Clear | No | . 2 | 7.2 | 20 | 0 | 0 | 0 | . 6 | . 25 |
| 0061 T0013 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0061 T0086 | 11/16/2012 | Clear | None | Clear | No | N/M | 8.0 | 13 | 0 | 0 | 0 | . 4 | 0 |
| 0061 T0115 | 11/16/2012 | Clear | None | Clear | No | . 3 | 8.2 | 13 | 0 | 0 | 0 | . 4 | . 25 |
| 0061 T0119 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0061 T0184 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0061 T0198 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0061 T0243 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0062 T 0160 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0062 T0295 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0062 T 0349 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0062 T0504 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0062 T 0505 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0063 T 0160 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0063T0239 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0064 T0070 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0064 T0348 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0064 T0554 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0066 T 0494 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0067 T0422 | 2/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0067 T0495 | 2/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0067 T 0616 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0067 T0850 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0067 T0920 | 2/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0068 T0009 | 4/9/2012 | Clear | None | Clear | No | N/M | 7.5 | 10 | 0 | 0 | 0 | 0 | 0 |
| 0068 T 0259 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  | 0 |
| 0068 T0434 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0068 T0587 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0068 T0841 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0068 T 0894 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0069 T 0022 | 3/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0069 T0085 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0069 T0159 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 007070072 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0070 T0105 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0070 T0124 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0036 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0038 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0149 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0239 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0367 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0071 T0405 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0455 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0480 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0495 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0568 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0578 | 5/16/2012 |  |  |  |  | 0 |  | * |  |  |  |  |  |
| 0071 T0583 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0717 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0733 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0071 T0770 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0072 T0346 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0072 T0432 | 5/16/2012 | Clear | None | Clear | No | . 2 | 6.8 | 13 | 0 | 0 | 0 | . 1 | . 25 |
| 0072 T0433 | 5/14/2012 | Clear | None | Clear | No | . 1 | 6.8 | 13 | 0 | 0 | 0 | . 01 | 0 |
| 0072 T0445 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0072 T0452 | 5/14/2012 |  |  |  |  | 0 |  | 3 |  |  |  |  |  |
| 0073 T0133 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0073 T0143 | 5/15/2012 | Clear | None | Clear | No | N/M | 6.9 | 16 | 0 | 0 | 0 | . 1 | . 25 |
| 0073 T0290 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0073 T0307 | 5/14/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0073 T0473 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0073 T0522 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0073 T0529 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0073 T0539 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0077 T0161 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0077 T0278 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 007770358 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 007770507 | 4/17/2012 | Clear | None | Clear | No | . 1 | 7 | 13 | 0 | 0 | 0 | . 1 | . 25 |
| 0077 T0815 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0078 T0171 | 12/24/2012 | Clear | None | Clear | No | . 1 | 6.7 | 3 | 0 | 0 | 0 | . 2 | 25 |
| 0078 T0197 | 12/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0078 T0204 | 12/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0079 T0124 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0079 T 0188 | 6/8/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0080 T 0017 | 11/6/2012 | Clear | None | Clear | No | N/M | 7.6 | 10 | 0 | 0 | 0 | 0 | . 25 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0080 T0018 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0080 T0093 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0080 T0095 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0080 T0185 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0080 T0230 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0081 T0108 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0081 T0111 | 10/17/2012 |  |  |  |  | N/M |  |  |  |  |  | 10+ |  |
| 0085 T0115 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T0124 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T 0125 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T 0176 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T 0796 | 3/7/2012 | Clear | None | Clear | No | . 1 | 8.3 | 10 | 0 | 0 | 0 | . 1 | 0 |
| 0085 T 0801 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T0803 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T0819 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T 0827 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0085 T 0852 | 9/20/2012 | Clear | None | Clear | No | N/M | 7.8 | 18 | 0 | 0 | 0 | . 1 | 0 |
| 0086 T 0161 | 9/17/2012 | Clear | None | Clear | No | . 4 | 7.8 | 19 | 0 | 0 | 0 | . 1 | 0 |
| $0086 T 0249$ | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0086 T 0375 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0086 T 0742$ | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 008670806 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0213 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0371 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0372 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0403 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0409 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 008970485 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 008970486 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0487 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0498 | 11/15/2012 | Clear | None | Clear | No | N/M | 8.3 | 11 | 0 | 0 | 0 | . 2 | . 25 |
| 0089 T0499 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 008970644 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 008970849 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0089 T0852 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 008970923 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T0963 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089T1038 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089T1059 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 008971063 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T1111 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0089 T 1120 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0049 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0197 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0263 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0394 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0463 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090T0483 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0561 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0562 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0090 T0637 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0091 T0001 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0091T000A | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0091 T0233 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0091 T0404 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0091 T0651 | 5/21/2012 | Clear | None | Clear | No | . 1 | 7.4 | 14 | 0 | 0 | 0 | . 4 | . 25 |
| 0091 T0652 | 5/21/2012 | Clear | None | Clear | No | . 1 | 7.2 | 13 | 0 | 0 | 0 | . 3 | 0 |
| 0092 T0147 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0092 T0165 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0092 T0169 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0092 T0347 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0092 T0351 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0093 T0322 | 10/9/2012 |  |  |  |  | 0 |  | * |  |  |  |  |  |
| 0093 T0704 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0094 T0550 | 11/15/2012 | Clear | None | Clear | No | . 1 | 7.9 | 10 | 0 | 0 | 0 | . 3 | . 25 |
| 0094 T0603 | 11/15/2012 | Clear | None | Clear | No | . 18 | 8.3 | 11 | 0 | 0 | 0 | . 3 | . 25 |
| 009770164 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0097 T0165 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0097 T0190 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 009770673 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0097 T0674 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0098 T0002 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0098 T0010 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 009970008 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0099 T0035 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 009970057 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0099 T0146 | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0099 T0255 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 009970306 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 009970356 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 009970467 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0100 T0018 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0100 T 0026$ | 12/13/2012 | Clear | None | Clear | No | . 5 | 7.8 | 11 | 0 | 0 | 0 | . 2 | 0 |
| 0100 T 0043 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0100 T 0172$ | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0100 T 0184 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 010070244 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101T0070 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101 T 0117 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101 T0192 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101 T0299 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101 T0372 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101 T0390 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101 T0393 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0101 T0429 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0102 T 0072 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0102 T 0524 | 5/31/2012 |  |  |  |  | 0 |  |  |  | * |  |  |  |
| $0103 T 0589$ | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0104T0380 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0106 T 0001$ | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0106 T 0005 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0106 T 0009 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0106T000A | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0106 T 0637$ | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0107T000A | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0107 T 0011$ | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0107 T 0151 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0107 T 0170$ | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0107 T 0186$ | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0107 T 0189$ | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0107 T 0195$ | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0107 T 0336 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 010770373 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0107 T 0408 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0107 T 0444 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0116 T 0238 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0116 T 0513 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0116 T 0738$ | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0116 T 0749$ | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0117 T0024 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0117 T0062 | 5/25/2012 | Clear | None | Clear | No | . 2 | 7.8 | 21 | 0 | 0 | 0 | . 2 | . 25 |
| 0117 T 0073 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0117 T 0129$ | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0117 T0205 | 5/24/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 011770220 | 5/24/2012 | Clear | None | Clear | No | N/M | 8 | 21 | 0 | 0 | 0 | . 1 | . 25 |
| 0117 T0228 | 9/11/2012 | Clear | None | Clear | No | N/M | 7.3 | 18 | 0 | 0 | 0 | 0 | 0 |
| 0117 T 0251 | 5/24/2012 | Clear | None | Clear | No | N/M | 7.9 | 19 | 0 | 0 | 0 | . 1 | 0 |
| 0117 T 0255 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0117 T 0258 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 011770259 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0117 T0284 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0117 T0585 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0118 T 0017 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0118 T0019 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0118 T 0159 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0118 T 0268 | 5/25/2012 | Clear | None | Clear | No | . 1 | 7.8 | 22 | 0 | 0 | 0 | . 2 | . 25 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0118 T0326 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0118 T 0500 | 9/11/2012 | Clear | None | Clear | No | N/M | 7.4 | 10 | 0 | 0 | 1.5 | 0 | 0 |
| 0118 T0525 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0118 T 0534 | 9/11/2012 | Clear | None | Clear | No | N/M | 7.6 | 19 | 0 | 0 | 1.5 | 0 | 0 |
| 0118 T0688 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0118 T0800 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0119 T 0023$ | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 011970071 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0091 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0105 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0106 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0218 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0225 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0313 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T 0314 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0333 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0338 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T 0362 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0455 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0458 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0119 T0466 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 011970691 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0026 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0027 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0036 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0041 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0042 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0067 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0071 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0102 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 012070113 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120T0128(N | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0305 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0311 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0120 T 0312 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T 0313 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0369 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120 T0560 | 11/8/2012 | Clear | None | Clear | No | N/M | 7.9 | 9 | 0 | 0 | 0 | . 1 | . 25 |
| 0120 T0596 | 11/8/2012 | Clear | None | Clear | No | . 1 | 7.8 | 9 | 0 | 0 | 0 | . 1 | . 25 |
| 0120 T0705 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0120T0720 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0121T0069 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0121T0120 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0121 T0121 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0121 T0123 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0121 T0124 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0121 T0125 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0121T0146 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0042 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T 0150 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T 0216 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0225 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T 0227 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0229 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0231 | 11/9/2012 | Clear | None | Clear | No | N/M | 7.8 | 11 | 0 | 0 | . 6 | 0 | 0 |
| 0122 T0276 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0280 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T 0325 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0349 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0354 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0407 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0410 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0412 | 6/21/2012 |  |  |  |  | 0 |  | $\cdots$ |  |  |  |  |  |
| 0122 T 0419 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0423 | 6/21/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0122 T0429 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0122 T0441 | 11/9/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0122 T 0444 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0125 T0260 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0125 T0334 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0126 T 0233$ | 9/21/2012 | Clear | None | Clear | No | . 3 | 7.3 | 17 | 0 | 0 | 0 | . 1 | . 25 |
| $0126 T 0384$ | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0126 T 0519$ | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0126 T 0585$ | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0126 T 0660$ | 5/30/2012 | Clear | None | Clear | No | N/M | 7 | 17 | 0 | 0 | 0 | . 2 | 0 |
| 0127 T0268 | 8/31/2012 | Clear | None | Clear | No | N/M | 7.6 | 25 | 0 | 0 | 1 | . 1 | 0 |
| 0127 T0297 | 8/31/2012 | Clear | None | Clear | No | N/M | 7.6 | 23 | 0 | 0 | . 4 | 1 | 25 |
| 0127 T 0710 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T 0712 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T0749 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 012770753 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T0756 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T0760 | 8/31/2012 | Clear | None | Clear | No | . 2 | 7.2 | 23 | 0 | 0 | . 8 | 0 | 0 |
| 0127 T0864 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T0883 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T0924 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T0932 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T1027 | 8/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0127 T1071 | 8/31/2012 | Clear | None | Clear | No | N/M | 7.8 | 21 | 0 | 0 | 0 | . 1 | 25 |
| 0128 T0028 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0128 T0101 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0128 T0598 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0128 T0806 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 013070997 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 013070998 | 9/25/2012 | Clear | None | Clear | No | N/M | 7.8 | 18 | 0 | 0 | . 1 | . 1 | 25 |
| 0131 T0012 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0131 T0036 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0131 T0086 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0131 T0090 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0131T0128 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0131 T0261 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0131 T0344 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0131T0380 | 8/7/2012 |  |  |  |  | 0 |  | $\underline{0}$ |  |  |  |  |  |
| 0131 T0441 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0132 TO 212 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0132 T 0596 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0132 T 0799 | 5/21/2012 | Clear | None | Clear | No | . 1 | 7.4 | 15 | 0 | 0 | . 1 | . 6 | 25 |
| 0132 T 0938 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0133 T 0160 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0135 T0026 | 8/16/2012 | Clear | None | Clear | No | . 1 | 6.9 | 20 | 0 | 0 | . 2 | . 4 | 0 |
| 0135 T 0119 | 11/6/2012 | Clear | None | Clear | No | N/M | 8.3 | 18 | 0 | 0 | 0 | . 2 | . 25 |
| $0136 T 0073$ | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0136 T 0110$ | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0136 T 0111$ | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0136 T 0129$ | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0136 T 0414$ | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 013970442 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 013970601 | 11/6/2012 | Clear | None | Clear | No | 1.1 | 8.1 | 16 | 0 | 0 | . 1 | . 4 | . 25 |
| 0140 T0189 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0141 T0475 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0141 T0877 | 11/30/2012 |  |  |  |  | 0 | * |  |  |  |  |  |  |
| 0142 T 0023 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0142 T 0052 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0142 T 0140 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0142 T 0166 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0142 T0329 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0142 T0427 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0142 T 0428 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0142 T 0571 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0143 T0055 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0143 T 0090$ | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0143 T0127 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0143 T0344 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0143 T0345 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 014470030 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0144 T 0061$ | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0144 T0067 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0144 T0069 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0144 T0087 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0144 T0102 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0144 T0112 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0145 T0116 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0145 T0127 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0145 T0128 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0145 T0312 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0145 T0326 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0145 T0362 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0145 T0372 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0146 T 0130$ | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0147 T0028 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0147 T0375 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0148 T0280 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0151 T0088 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0157 T0107 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 015970132 | 2/13/2012 | Clear | None | Clear | No | . 2 | 8.0 | 4 | 0 | 0 | 0 | . 2 | . 25 |
| 0159 T0855 | 2/13/2012 | Clear | None | Clear | No | N/M | 8.2 | 3 | 0 | 0 | . 1 | . 2 | . 25 |
| 015970901 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0159 T0960 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0160 T0090 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0160 T0266 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0160 T0294 | 5/22/2012 | Clear | None | Clear | No | . 2 | 7.7 | 17 | 0 | 0 | 0 | . 3 | . 5 |
| 0160 T0919 | 5/22/2012 | Clear | None | Clear | No | . 1 | 8.2 | 18 | 0 | 0 | 0 | . 1 | 25 |
| 0163 T0125 | 11/27/2012 | Clear | None | Clear | No | . 2 | 7.8 | 12 | 0 | 0 | 0 | . 1 | 25 |
| 0164 T0028 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0164 T0029 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0164 T0030 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0165 T0133 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0165 T0351 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0165 T0372 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0165 T0443 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL <br> SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0165 T 0449 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0165 T0455 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0165 T0499 | 11/6/2012 | Clear | None | Clear | No | . 14 | 7.8 | 6 | 0 | 0 | 0 | . 1 | . 5 |
| $0166 T 0039$ | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0166 T 0041 | 9/11/2012 | Clear | None | Clear | No | . 16 | 7.4 | 19 | 0 | 0 | 0 | . 1 | 0 |
| 0166 T0091 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0166 T 0156 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0166 T 0215 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0166 T 0229$ | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0166 T0254 | 10/11/2012 | Clear | None | Clear | No | . 1 | 7.6 | 6 | 0 | 0 | 0 | . 1 | . 25 |
| 0166 T 0255 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0166 T 0273 | 9/11/2012 | Clear | None | Clear | No | N/M | 7.7 | 19 | 0 | 0 | 0 | 0 | 0 |
| 0166 T0670 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0166 T0714 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0166 T0755 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0044 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0121 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0164 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0172 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0276 | 10/9/2012 | Clear | None | Clear | No | . 3 | 8 | 14 | 0 | 0 | 0 | . 1 | . 25 |
| 0167 T0280 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T 0313 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0321 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0669 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0738 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167T0778(N | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167T0778(S | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0167 T0841 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0024 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0031 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0038 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0042 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0047 | 11/29/2012 | Clear | None | Clear | No | . 1 | 7.8 | 8 | 0 | 0 | 0 | . 1 | . 25 |
| 0168 T0057 | 11/29/2012 | Clear | Other | Clear | No | . 1 | 7.8 | 7 | 0 | 0 | 1.5 | 0 | 0.25 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY |  | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1. | 2.5 | 1 |
| 0168 T0065 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0159 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0228 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0231 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T 0242 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0244 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0282 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0296 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0567 | 11/8/2012 | Clear | None | Clear | No | . 1 | 7.1 | 10 | 0 | 0 | 0 | . 1 | 0 |
| 0168 T0581 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0583 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0630 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0634 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0168 T0638 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 016970359 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0169 T0376 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0171 T0014 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0171T0271 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0171T0299 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0174T0309 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0174 T0448 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0174 T0786 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0174 T0879 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0175 T 0109$ | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0111 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0113 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0115 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0117 | 6/25/2012 | Clear | None | Clear | No | . 7 | 7.5 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 0175 T0190 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0272 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T 0407 | 8/23/2012 | Clear | None | Clear | No | N/M | 7.9 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 0175 T 0436 | 5/18/2012 | Clear | None | Clear | No | N/M | 8.5 | 17 | 0 | 0 | 0 | . 1 | . 25 |
| 0175 T0484 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0488 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0175 T0495 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0496 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0526 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0681 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0175 T0707 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0176 T0565 | 8/27/2012 | Clear | None | Clear | No | . 15 | 7.6 | 22 | 0 | 0 | . 1 | . 1 | . 25 |
| $0176 T 0784$ | 8/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0176 T 0785$ | 8/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 017970181 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0179 T0293 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0179 T0326 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0179 T0351 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0179 T0418 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0179 T0716 | 11/8/2012 | Clear | None | Clear | No | . 3 | 7.8 | 9 | 0 | 0 | 0 | . 6 | . 25 |
| 0180 T 0051 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 018070070 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 018070107 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0180 T 0246 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0180 T 0247 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0180 T 0249$ | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0180 T0250 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0180 T 0266 | 8/3/2012 | Clear | None | Clear | No | . 3 | 7.9 | 20 | 0 | 0 | . 1 | . 2 | 0 |
| 018070317 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0180 T 0339 | 2/1/2012 | Clear | None | Clear | No | . 2 | 7.6 | 16 | 0 | 0 | 0 | 0 | . 25 |
| 0181 T0156 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0181 T0663 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0181 T0686 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0181 T0839 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0181 T0841 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0181 T0931 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 018171060 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0182 T0095 | 8/16/2012 | Clear | None | Clear | No | . 14 | 7.7 | 23 | 0 | 0 | . 1 | . 3 | 0 |
| 0182 T 0176 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0182 T0396 | 8/17/2012 | Clear | None | Clear | No | . 49 | 7.9 | 22 | 0 | 0 | . 1 | . 1 | 0 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\text {0 }}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0182T0539 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0182 T 0642 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0186 T 0378$ | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0187 T 0007 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0187 T 0015 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0187 T 0201$ | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0187 T0213 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0187 T 0244 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0187 T 0324 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0192 T0178 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0192 T0328 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0192 T0333 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0192 T0377 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0192 T0463 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0192 T0727 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0193 T 0416$ | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0193 T0888 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0193 T0912 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0194 T0061 | 11/21/2012 |  | - |  |  | 0 |  |  |  |  |  | - |  |
| 0194 T0156 | 6/25/2012 | Clear | None | Clear | No | . 1 | 7.1 | 17 | 0 | 0 | 0 | . 4 | . 25 |
| $0194 T 0157$ | 6/25/2012 | Clear | None | Clear | No | . 1 | 7.4 | 16 | 0 | 0 | 0 | . 4 | 0 |
| 0194 T 0873 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0196 T 0209$ | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0196 T 0357$ | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0196 T 0589$ | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0198 T0018 | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 019970182 | 5/31/2012 | Clear | None | Clear | No | . 1 | 7.7 | 16 | 0 | 0 | 0 | . 2 | 0 |
| $0203 T 0636$ | 2/27/2012 | Clear | None | Clear | No | . 1 | 8.2 | 8 | 0 | 0 | 0 | . 2 | 0 |
| $0203 T 0669$ | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0203 T 0969$ | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0204 T 0035$ | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0204 T0201 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0204 T0208 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0214 T 0036$ | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0214 T0044 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0214 T0061 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0214 T0239 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0214 T 0270 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0215 T0070 | 6/15/2012 | Clear | None | Clear | No | . 14 | 8.2 | 18 | 0 | 0 | . 3 | . 3 | . 25 |
| 0215 T0601 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0216 T0511 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0216 T 0737$ | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0219 T0049 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0219 T0052 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 021970112 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0219 T 0141 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0219 T 0190 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0219 T0232 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0219 T 0343 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0220 T0488 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0220 T0533 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0220 T0538 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0221 T0045 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0221 T0053 | 6/28/2012 |  |  |  |  | 0 |  | $=$ |  |  |  |  |  |
| 0221T0136(N | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0221T0136(S | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0221 T0148 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0221 T0187 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0221 T0250 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0222 T 0007$ | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0222 T0095 | 10/9/2012 | Clear | None | Clear | No | . 18 | 8.0 | 13 | 0 | 0 | 0 | . 1 | 0 |
| 0222 T0098 | 6/14/2012 | Clear | None | Clear | No | . 1 | 8 | 18 | 0 | 0 | 0 | . 1 | . 25 |
| $0222 T 0327$ | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0223 T0227 | 10/9/2012 | Clear | None | Clear | No | . 1 | 6.6 | 12 | 0 | 0 | 0 | . 1 | . 25 |
| 0223 T0240 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0223 T 0269$ | 11/30/2012 | Clear | None | Clear | No | N/M | 7.0 | 9 | 0 | 0 | 0 | . 1 | . 25 |
| 0223 T0284 | 10/9/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $0223 T 0881$ | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0223 T0882 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0223 T0883 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0231 T0418 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0231 T0422 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0231 T0551 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0231 T0552 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0231 T0564 | 4/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0231 T0573 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0231 T0691 | 7/30/2012 | Clear | None | Clear | No | N/M | 8 | 23 | 0 | 0 | 0 | . 1 | 0 |
| $0232 T 0019$ | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 023270020 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0055$ | 11/7/2012 | Clear | None | Clear | No | N/M | 7.4 | 8 | 0 | 0 | 0 | . 1 | 0 |
| 0232 T 0072 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0073$ | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0079$ | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0232 T0086 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0232 T0094 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0232 T0095 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0096$ | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0232 T 0124 | 11/7/2012 | Clear | None | Clear | No | N/M | 7.8 | 12 | 0 | 0 | . 6 | . 1 | 0 |
| $0232 T 0179$ | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0432$ | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0436$ | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0441$ | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0232 T 0443 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0232 T 0449$ | 8/16/2012 | Clear | None | Clear | No | . 1 | 8.0 | 18 | 0 | 0 | 0 | . 2 | 0 |
| 0233 T0309 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0233 T 0340$ | 8/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0233 T 0395$ | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0233 T 0397$ | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0233 T0414 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0233 T 0693$ | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0233 T 0715$ | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0233 T 0752$ | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0234 T0028 | 8/8/2012 | Clear | None | Clear | No | . 4 | 7.9 | 25 | 0 | 0 | . 3 | . 1 | . 25 |
| 0234 T 0183 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0234 T0402 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0234 T0403 | 8/8/2012 | Clear | None | Clear | No | N/M | 7.6 | 25 | 0 | 0 | . 3 | . 1 | . 25 |
| 0234 T0535 | 8/8/2012 | Clear | None | Clear | No | N/M | 7.7 | 21 | 0 | 0 | 0 | . 1 | . 25 |
| 0234 T4175 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0236 T 0122$ | 11/16/2012 |  |  |  |  | 0 |  | = |  |  |  |  |  |
| $0236 T 0332$ | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0236 T 0362$ | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0236 T 0414$ | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0129 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0143 | 10/5/2012 | Clear | None | Clear | No | . 1 | 8.0 | 18 | 0 | 0 | 0 | . 3 | 0 |
| 0237 T0195 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0202 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0203 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0205 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0259 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0267 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0310 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0333 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0340 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0341 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0237 T0372 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0238 T0638 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0238 T0975 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0238 T 1080 | 8/2/2012 | Clear | None | Clear | No | . 2 | 7.4 | 18 | 0 | 0 | . 1 | . 2 | . 25 |
| 0238 T1361 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 023970203 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 023970227 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 023970527 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 023970740 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0245 T0015 | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0245 T 0023$ | 10/1/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $0246 T 0013$ | 8/30/2012 | Clear | None | Clear | No | . 2 | 8.0 | 19 | 0 | 0 | 0 | . 2 | 0 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\text {U }}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| $0246 T 0108$ | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 024770123 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0247 T 0154 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0250 T0181 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0251 T0024 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0251 T0044 | 6/7/2012 | Clear | None | Clear | No | . 5 | 7.5 | 17 | 0 | 0 | 0 | . 4 | . 25 |
| 0251 T0094 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0251 T0098 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0251 T0350 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0251 T0413 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0251 T0676 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0252 T0038 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0252 T0080 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0252 T 0285 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0252 T 0288 | 11/20/2012 | Clear | None | Clear | No | . 64 | 8.0 | 11 | 0 | 0 | 0 | . 6 | 0 |
| 0252 T0540 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0252 T0561 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0252T0565 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0253 T0109 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0255 T 0150 | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0256 T 0068$ | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0263 T0065 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0264 T0137 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0264 T0178 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0264 T 0198 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0264 T0212 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 027570006 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 027570018 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0275T001B | 2/13/2012 | Clear | None | Clear | No | . 1 | 7.7 | 3 | 0 | 0 | 0 | . 3 | 0 |
| 0275 T0027 | 2/13/2012 | Clear | None | Clear | No | . 2 | 8.2 | 4 | 0 | 0 | 0 | . 1 | 0 |
| 027770514 | 5/22/2012 | Clear | None | Clear | No | N/M | 7.9 | 20 | 0 | 0 | 0 | . 4 | 25 |
| 027770528 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0280 T 0373 | 11/27/2012 | Clear | None | Clear | No | . 1 | 7.6 | 10 | 0 | 0 | 0 | . 1 | . 25 |
| 0283 T 0121 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL <br> SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0283 T0514 | 5/29/2012 | Clear | None | Clear | No | . 1 | 7.4 | 20 | 0 | 0 | 0 | . 1 | . 25 |
| 0284 T0356 | 6/27/2012 | Clear | None | Clear | No | . 4 | 8.6 | 27 | 0 | 0 | 0 | . 2 | . 25 |
| 0284 T 0900 | 11/6/2012 | Clear | None | Clear | No | N/M | 8.1 | 10 | 0 | 0 | 0 | 0 | . 25 |
| 0285 T 0169 | 6/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0285 T 0741 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0285 T 1225 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0285 T 1226 | 6/14/2012 | Clear | None | Clear | No | N/M | 8.2 | 18 | 0 | 0 | 0 | 0 | . 25 |
| $0287 T 0108$ | 6/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0292 T0122 | 11/21/2012 | Clear | None | Clear | No | N/M | 7 | 12 | 0 | 0 | . 8 | 0 | . 25 |
| 0292 T0123 | 12/13/2012 | Clear | None | Clear | No | . 13 | 6.8 | 8 | 0 | 0 | 0 | . 1 | 25 |
| 0292 T0728 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0294 T0015 | 4/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0294 T0470 | 4/3/2012 | Clear | None | Clear | No | . 11 | 7.7 | 13 | 0 | 0 | 0 | 0 | 0 |
| 0295 T0512 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0295 T0572 | 5/31/2012 |  |  |  |  | 0 |  | . |  |  |  |  |  |
| 0296T000A | 4/2/2012 |  | . |  |  | 0 |  | - |  |  |  |  |  |
| 0296T000B | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0296 T 0542$ | 4/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0296 T 0543$ | 4/2/2012 |  |  |  | - | 0 |  |  |  |  |  |  |  |
| $0296 T 0576$ | 5/31/2012 | Clear | None | Clear | No | N/M | 8.4 | 19 | 0 | 0 | 0 | . 1 | 0 |
| $0296 T 0622$ | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0296 T 0629$ | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0296 T0737 | 5/31/2012 | Clear | None | Clear | No | . 1 | 8.3 | 19 | 0 | 0 | 0 | . 1 | 0 |
| $0296 T 0785$ | 4/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0296 T 0949$ | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029770023 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0052 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0094 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0099 | 6/25/2012 | Clear | None | Clear | No | N/M | 8 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 0297 T0164 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029770166 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029770174 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029770450 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029770487 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0297 T0493 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0494 | 3/27/2012 | Clear | None | Clear | No | . 1 | 7.8 | 12 | 0 | 0 | . 8 | 0 | 0 |
| 0297 T0502 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0541 | 4/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0543 | 5/31/2012 | Clear | None | Clear | No | N/M | 8.1 | 19 | 0 | 0 | 0 | . 1 | 0 |
| 0297 T0604 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0632 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0680 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0773 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0297 T0774 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029771123 | 5/31/2012 | Clear | None | Clear | No | . 1 | 8.6 | 19 | 0 | 0 | 0 | . 1 | 0 |
| 0298 T0226 | 8/23/2012 | Clear | None | Clear | No | . 2 | 7.6 | 18 | 0 | 0 | 0 | . 2 | 25 |
| 0298 T0467 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0298 T0478 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0298 T0479 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0298 T0497 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0298 T0701 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0299 T0166 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029970386 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029970444 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029970470 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029970612 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 029970828 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0301 T0104 | 8/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0301 T0115 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0301 T0206 | 8/27/2012 | Clear | None | Clear | No | . 3 | 7.9 | 23 | 0 | 0 | 0 | . 4 | . 25 |
| 0301 T0210 | 11/9/2012 | Clear | None | Clear | No | N/M | 7.7 | 13 | 0 | 0 | 0 | . 4 | . 25 |
| 0301T0211 | 8/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0301 T0249 | 8/27/2012 | Clear | None | Clear | No | . 3 | 8.0 | 22 | 0 | 0 | 0 | . 6 | . 50 |
| 0301 T0483 | 8/27/2012 | Clear | None | Clear | No | . 76 | 8.0 | 22 | 0 | 0 | . 6 | 0 | 0 |
| 0302T0015 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0302 T0026 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0302T0179 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0302 T 0185 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0302 T 0244 | 8/20/2012 |  |  | . |  | 0 |  |  |  |  |  |  |  |
| $0302 T 0297$ | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0302 T 0385$ | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0302 T 0421 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0302 T 0659 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0302 T0980 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0302 T 1103$ | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0303 T 0435$ | 8/2/2012 | Clear | None | Clear | No | . 4 | 6.8 | 20 | 0 | 0 | 0 | . 4 | . 25 |
| 0303 T0480 | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0303 T 0565$ | 8/2/2012 | Clear | None | Clear | No | . 1 | 7.1 | 19 | 0 | 0 | 0 | . 6 | . 50 |
| 0303 T0678 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0303 T0911 | 11/15/2012 | Clear | None | Clear | No | . 1 | 8.3 | 13 | 0 | 0 | 0 | . 6 | . 25 |
| 0303T1480 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0303T1486 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0303T1783 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0303T1805 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0303T1830 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0303 T 1831 | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0304 T0221 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0304 T0453 | 9/12/2012 | Clear | None | Clear | No | . 22 | 7.9 | 20 | 0 | 0 | 0 | . 2 | 0 |
| 0304 T0518 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0304 T 0752$ | 5/21/2012 | Clear | None | Clear | No | . 2 | 8.4 | 16 | 0 | 0 | . 4 | . 1 | . 25 |
| $0304 T 0755$ | 9/12/2012 | Clear | None | Clear | No | . 2 | 7.7 | 20 | 0 | 0 | . 1 | . 2 | . 25 |
| 0304T0889 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0305T000A | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0305 T0227 | 7/23/2012 | Clear | None | Clear | No | . 2 | 7.1 | 19 | 0 | 0 | 0 | . 2 | 0 |
| 0305 T0294 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0305 T 0437$ | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0305 T0450 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0305 T 0468 | 7/13/2012 | Clear | None | Clear | No | . 2 | 7.9 | 20 | 0 | 0 |  | 0 | 0 |
| 0305T0485 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0305T0541 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0305 T 0818 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0305 T 0841 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0305 T 0849 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0305 T 0872$ | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0305 T 0878$ | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0306 T 0171$ | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0306 T 0756$ | 7/24/2012 | Clear | None | Clear | No | N/M | 7.4 | 20 | 0 | 0 | 0 | . 2 | 0 |
| $0306 T 1127$ | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0307 T 0091 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 030770480 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0313 T 0143 | 8/30/2012 | Clear | None | Clear | No | . 1 | 7.8 | 20 | 0 | 0 | 0 | . 2 | 0 |
| $0314 T 0094$ | 2/2/2012 | Clear | None | Clear | No | . 3 | 7.6 | 11 | 0 | 0 | 0 | . 01 | . 25 |
| $0314 \mathrm{TO200}$ | 5/16/2012 | Clear | None | Clear | No | . 2 | 7.0 | 15 | 0 | 0 | . 1 | 0 | 0 |
| $0314 T 0202$ | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0314 T 0212$ | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0314 T 0349$ | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0314 T 0697$ | 8/31/2012 | Clear | None | Clear | No | . 4 | 7.5 | 22 | 0 | 0 | 0 | . 3 | 0 |
| 0315 T0034 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0074 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0315 T 0138$ | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0180 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0193 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0204 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0206 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0215 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T 0369 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0373 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0550 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0613 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0623 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0315 T0694 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0316 T 0133 | 4/24/2012 | Clear | None | Clear | No | . 1 | 7.5 | 12 | 0 | 0 | 0 | . 3 | 0 |
| 0316 T 0138 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0316 T 0139 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0316 T 0258$ | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0316 T 0260$ | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{\circ}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| $0316 T 0266$ | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0316 T 0308$ | 11/5/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $0316 T 0312$ | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0316 T 0314$ | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0316 T 0319$ | 11/5/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $0316 T 0391$ | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0138 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0142 | 11/27/2012 |  |  | . |  | 0 |  |  |  |  |  |  |  |
| 0317 T0153 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T 0181 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0305 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0310 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0329 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0354 | 6/4/2012 | Clear | None | Clear | No | . 1 | 6.9 | 16 | 0 | 0 | . 4 | . 2 | 0 |
| 0317 T0383 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0467 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0469 | 6/21/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0317 T0520 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0317 T0681 | 6/21/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0318 T0030 | 4/18/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0318 T0061 | 4/18/2012 | Clear | None | Clear | No | . 4 | 7.4 | 12 | 0 | 0 | 0 | . 6 | 0 |
| 0318 T0526 | 4/18/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 031970086 | 11/20/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 031970720 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 031970721 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0320 T0312 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0320 T0421 | 6/21/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0320 T0770 | 2/27/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0320 T0828 | 6/21/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0321 T0038 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0321 T0065 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0322T000A | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0322 T0495 | 4/9/2012 | Clear | None | Clear | No | . 2 | 7.7 | 9 | 0 | 0 | 0 | . 2 | . 25 |
| 0333 T0100 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| $0333 T 0101$ | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0352 T0016 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0352 T0197 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0352 T 0200 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0353T0001 | 5/29/2012 | Clear | None | Clear | No | . 1 | 7.8 | 20 | 0 | 0 | 0 | . 3 | . 25 |
| 0353 T0574 | 5/29/2012 | Clear | None | Clear | No | N/M | 7.7 | 25 | 0 | 0 | 0 | . 4 | 0 |
| 0354 T 0270 | 5/29/2012 | Clear | None | Clear | No | . 1 | 8.5 | 23 | 0 | 0 | 0 | . 1 | 25 |
| 0355 T0297 | 2/28/2012 | Clear | None | Clear | No | . 2 | 8.2 | 3 | 0 | 0 | . 2 | . 2 | . 25 |
| 0356 T0047 | 2/28/2012 | Clear | None | Clear | No | . 1 | 7.9 | 6 | 0 | 0 | 0 | . 4 | . 25 |
| $0356 T 0249$ | 12/14/2012 | Clear | None | Clear | No | N/M | 7.1 | 6 | 0 | 0 | 0 | . 1 | 0 |
| $0356 T 0292$ | 2/28/2012 | Clear | None | Clear | No | . 1 | 7.9 | 4 | 0 | 0 | 0 | . 2 | 0 |
| 0356 T0324 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0356 T 0478$ | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0356 T0583 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0357 T0400 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0357 T0567 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 035770643 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0357 T0664 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0361 T0101 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0361 T0160 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0361 T0265 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0363 T0324 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0363T0328 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0364 T0347 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0364 T0394 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0364 T0485 | 11/20/2012 | Clear | None | Clear | No | N/M | 7.8 | 8 | 0 | 0 | 0 | 0 | 0 |
| 0364 T0486 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0364 T0697 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0364 T0792 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0365 T0056 | 11/20/2012 | Clear | None | Clear | No | N/M | 8 | 10 | 0 | 0 | 0 | 0 | . 25 |
| 0365 T 0210 | 12/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0365T0212 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0365 T0252 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0365 T0393 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0365 T0507 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0365 T0508 | 11/15/2012 | Clear | None | Clear | No | . 64 | 7.9 | 12 | 0 | 0 | 0 | . 1 | . 25 |
| 0365 T0512 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0365 T0683 | 11/20/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0365 T0753 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0365 T0754 | 11/20/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $0366 T 0156$ | 4/3/2012 | Clear | None | Clear | No | . 18 | 6.7 | 11 | 0 | 0 | 0 | . 1 | . 25 |
| $0366 T 0207$ | 11/15/2012 | Clear | None | Clear | No | . 6 | 8.0 | 10 | 0 | 0 | 0 | . 1 | 0 |
| 0366 T0352 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0366 T0364 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0366 T0374 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0366 T0413 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0366 T0450 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0366 T0519 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 036670716 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0366 T0731 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0366 T0887 | 6/21/2012 | Clear | None | Clear | No | . 1 | 8.6 | 22 | 0 | 0 | 0 | . 03 | . 25 |
| 0367 T0191 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0367 T0735 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0367 T1117 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0368 T0189 | 5/31/2012 | Clear | None | Clear | No | . 38 | 7.4 | 18 | 0 | 0 | . 8 | . 1 | . 26 |
| 0368 T0628 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0368 T0799 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369T000A | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 036970103 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 036970184 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0213 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0218 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0223 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0229 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0328 | 3/23/2012 | Clear | None | Clear | No | N/M | 7.6 | 14 | 0 | 0 | 0 | . 1 | . 25 |
| 036970513 | 8/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0526 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0669 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\mathrm{OIL}$ SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0369 06998 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0699 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 036970726 | 8/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 036970737 | 8/16/2012 | Clear | None | Clear | No | . 1 | 7.9 | 18 | 0 | 0 | 0 | . 1 | 0 |
| 036970738 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0369 T0776 | 4/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0236 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0246 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0254 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0271 | 5/21/2012 | Clear | None | Clear | No | N/M | 8.1 | 20 | 0 | 0 | 0 | . 2 | 0 |
| 0370 T0313 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0317 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0323 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0342 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0370 T 0358$ | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0402 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0524 | 5/21/2012 | Clear | None | Clear | No | . 1 | 7.8 | 21 | 0 | 0 | 0 | . 1 | 0 |
| 0370 T0534 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0549 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0370 T0586 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0371 T0246 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0371 T0322 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0371 T0328 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0372 T0108 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0372 T0126 | 7/31/2012 | Clear | None | Clear | No | N/M | 7.8 | 22 | 0 | 0 | 0 | . 1 | . 25 |
| 0372 T0127 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0372 T0155 | 7/31/2012 | Clear | None | Clear | No | N/M | 7.5 | 25 | 0 | 0 | 0 | . 2 | 0 |
| 0372 T0614 | 8/7/2012 | Clear | None | Clear | No | . 25 | 8.1 | 21 | 0 | 0 | 0 | 0 | . 25 |
| 0372 T0906 | 7/31/2012 | Clear | None | Clear | No | . 1 | 7.8 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 0372 T0914 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0250 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0446 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0609 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0617 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY |  | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0375 T0629 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0632 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0655 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0733 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0375 T0749 | 8/20/2012 |  |  |  |  | 0 |  |  |  | . |  |  |  |
| 0375 T0753 | 8/20/2012 | Clear | None | Clear | No | . 17 | 7.9 | 22 | 0 | 0 | . 8 | 0 | 0 |
| $0376 T 0041$ | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0376 T 0076$ | 7/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0376 T 0134$ | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0376 T 0151$ | 8/17/2012 | Clear | None | Clear | No | . 75 | 8.0 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 0376 T0172 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0174 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0376 T 0175$ | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0198 | 7/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0211 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0376 T 0220$ | 8/24/2012 | Clear | None | Clear | No | . 13 | 7.6 | 19 | 0 | 0 | . 1 | . 2 | . 25 |
| $0376 T 0300$ | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0302 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0313 | 7/17/2012 | Clear | None | Clear | No | . 1 | 7.2 | 20 | 0 | 0 | 0 | . 1 | 0 |
| 0376 T0362 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0364 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0368 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0452 | 7/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0480 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0536 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0376 T0539 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0376 T 0705$ | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0376 T 0723$ | 8/8/2012 | Clear | None | Clear | No | . 2 | 7.7 | 24 | 0 | 0 | 0 | . 4 | . 25 |
| 0376 T0796 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 037770190 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0377 T0192 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 037770245 | 7/19/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 037770246 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0377 T0273 | 6/15/2012 | - |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0377 T0314 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 037770376 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 037770395 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 037770426 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0012 | 1/31/2012 | Clear | None | Clear | No | . 2 | 7.6 | 15 | 0 | 0 | 0 | 0 | 0 |
| 0378 T0123 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0138 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0264 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0265 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0279 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0361 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0437 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0439 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0440 | 2/7/2012 | Clear | None | Clear | No | 1 | 7.8 | 10 | 0 | 0 | 0 | . 02 | . 25 |
| 0378 T0446 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0378 T0476 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0379 T0404 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0380 T0319 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0380 T0447 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0380 T 0463$ | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0380 T0478 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0380 T 0636$ | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0380 T 0721$ | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0380T0809 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0380T0833 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0380 T 0904 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0388 T0022 | 6/4/2012 | Clear | None | Clear | No | . 1 | 7.4 | 16 | 0 | 0 | 0 | . 4 | . 25 |
| 0388 T0060 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0388 T0104 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0388 T0381 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0388T0382 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0389T0001 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0389T0061 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0389 T0089 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0389 T0098 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0389 T0684 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0389 T0880 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0390 T0048 | 4/24/2012 | Clear | None | Clear | No | . 1 | 7.6 | 11 | 0 | 0 | . 6 | 0 | 0 |
| 0390 T0092 | 4/24/2012 | Clear | None | Clear | No | . 1 | 7.7 | 11 | 0 | 0 | 0 | . 2 | 25 |
| 0390 T0215 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0390 T0297 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0390 T0370 | 4/25/2012 | Clear | None | Clear | No | . 1 | 7.8 | 11 | 0 | 0 | . 1 | . 2 | 25 |
| 0390 T0382 | 4/24/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0390 T0561 | 4/25/2012 | Clear | None | Clear | No | . 1 | 6.9 | 12 | 0 | 0 | 0 | . 4 | . 25 |
| 0390 T0594 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0391 T0309 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0391 T0376 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0391 T0383 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0391 T0433 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0391 T0693 | 4/24/2012 |  |  |  |  | 0 |  | $=$ |  |  |  |  |  |
| 0391 T0700 | 4/25/2012 |  |  |  |  | 0 |  | \% |  |  |  |  |  |
| 0392 T0156 | 6/4/2012 | Clear | None | Clear | No | . 4 | 7.5 | 19 | 0 | 0 | 0 | . 8 | 0 |
| 0392 T0209 | 3/6/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0392 T0213 | 3/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0392 T0325 | 10/26/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0392 T0329 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0392 T0334 | 10/26/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0392 T0547 | 11/20/2012 | Clear | None | Clear | No | N/M | 8.2 | 6 | 0 | 0 | 0 | . 2 | 0 |
| 0392 T0581 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0392 T0651 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0393 T0024 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0393 T0047 | 4/24/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0393 T0053 | 4/24/2012 |  |  |  |  | 0 |  | 8 |  |  |  |  |  |
| $0393 T 0084$ | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0110 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0131 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0185 | 3/7/2012 | Clear | None | Clear | No | . 2 | 8.1 | 9 | 0 | 0 | . 6 | 0 | 0 |
| $0394 T 0235$ | 2/13/2012 | Clear | None | Clear | No | . 1 | 7.8 | 10 | 0 | 0 | 0 | . 1 | 0 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0394 T0281 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0328 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0332 | 2/1/2012 | Clear | None | Clear | No | . 4 | 7.8 | 17 | 0 | 0 | 0 | . 4 | . 25 |
| 0394 T0356 | 3/7/2012 | Clear | None | Clear | No | . 1 | 7.8 | 8 | 0 | 0 | 0 | . 3 | 25 |
| 039470372 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0378 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 039470472 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 039470549 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0708 | 3/7/2012 | Clear | None | Clear | No | . 3 | 7.8 | 8 | 0 | 0 | . 1 | . 2 | 0 |
| 0394 T0914 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0394 T0917 | 2/13/2012 | Clear | None | Clear | No | . 3 | 7.8 | 11 | 0 | 0 | 0 | . 1 | 25 |
| 0394 T1216 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0395 T0196 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0395 T0230 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0395 T0296 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0396 T0035 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0396 T0045 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0396 T0056 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0396 T0236 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0396 T 0248$ | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0396 T0259 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0398 T0079 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0398 T0102 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0398 T0162 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0398 T0200 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0399 T0033 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0399 T0093 | 6/25/2012 | Clear | None | Clear | No | . 1 | 7.3 | 15 | 0 | 0 | 0 | . 6 | . 25 |
| 039970094 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 039970818 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 039970821 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0436 T 0078$ | 12/14/2012 | Clear | None | Clear | No | N/M | 7.1 | 6 | 0 | 0 | 0 | . 1 | 0 |
| 0440 T0024 | 12/14/2012 | Clear | None | Clear | No | . 08 | 6.8 | 9 | 0 | 0 | 0 | . 1 | . 25 |
| 0441 T0193 | 12/14/2012 | Clear | None | Clear | No | . 14 | 7.4 | 4 | 0 | 0 | 0 | . 1 | 0 |
| 0441 T0258 | 12/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\text {0 }}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ | $\mathrm{mg} / \mathrm{L}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0441T0259 | 12/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0444 T0059 | 12/13/2012 | Clear | None | Clear | No | 3.91 | 7.5 | 6 | 0 | 0 | 0 | . 1 | . 25 |
| 0445 T0060 | 12/13/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $0446 T 0003$ | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0446 T 0010$ | 11/21/2012 | Clear | None | Clear | No | N/M | 7.6 | 12 | 0 | 0 | 0 | . 1 | . 25 |
| 0447 T0543 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0447 T0590 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 044770600 | 11/15/2012 | Clear | None | Clear | No | . 1 | 8.0 | 10 | 0 | 0 | 0 | . 1 | 0 |
| 0447 T 0718 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0449 T0080 | 6/4/2012 | Clear | None | Clear | No | . 1 | 7.3 | 17 | 0 | 0 | 0 | 0 | 0 |
| 0449T0081 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0449 T0083 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0449 T0887 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0133 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T 0142 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045070183 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T 0187 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0200 | 8/20/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0450 T0208 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0255 | 8/15/2012 | Clear | None | Clear | No | . 1 | 8.1 | 19 | 0 | 0 | 0 | . 1 | 0 |
| 0450 T0305 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0309 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0335 | 8/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0340 | 8/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0358 | 8/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0464 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045070540 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0601 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045070645 | 8/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0450 T0646 | 8/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0450 T 0658$ | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045070685 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0451 T0048 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0451 T 0059$ | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0451 T0060 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0451T0070 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0451 T0165 | 5/21/2012 | Clear | None | Clear | No | N/M | 7.9 | 17 | 0 | 0 | 0 | . 2 | 0 |
| 0451 T0314 | 7/30/2012 | Clear | None | Clear | No | N/M | 8.1 | 24 | 0 | 0 | 4 | 1 | 0 |
| 0452 T0241 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0453 T0592 | 8/7/2012 | Clear | None | Clear | No | . 1 | 7.3 | 23 | 0 | 0 | 0 | . 02 | . 5 |
| 0453 T0846 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0455 T 0448 | 7/31/2012 | Clear | None | Clear | No | . 6 | 7.5 | 19 | 0 | 0 | 0 | . 1 | 0 |
| 0455 T0537 | 11/19/2012 | Clear | None | Clear | No | . 15 | 8.0 | 11 | 0 | 0 | 0 | . 2 | . 25 |
| 0455 T0553 | 7/31/2012 | Clear | None | Clear | No | . 18 | 7.2 | 20 | 0 | 0 | 0 | . 2 | . 25 |
| 0455 T0744 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0456 T0087 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0456 T0090 | 7/31/2012 | Clear | None | Clear | No | . 2 | 7.7 | 21 | 0 | 0 | 0 | . 4 | 0 |
| 0456 T0147 | 7/31/2012 | Clear | None | Clear | No | . 3 | 7.4 | 20 | 0 | 0 | 0 | . 2 | 0 |
| 0456 T0321 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770043 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770092 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0457 T0183 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0457 T0337 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770384 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0457 T0420 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0457 T0432 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770484 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0457 T0568 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770570 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770578 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770639 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770643 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045770719 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0457 T0785 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0166 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0290 | 6/8/2012 | Clear | None | Clear | No | . 2 | 7.0 | 15 | 0 | 0 | 0 | . 4 | . 25 |
| 0458 T0293 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0408 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0458 T0510 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0512 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0525 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0526 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0580 | 6/8/2012 | Clear | None | Clear | No | . 3 | 7.2 | 17 | 0 | 0 | 0 | . 4 | 0 |
| 0458 T 0587 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  | - |  |  |
| 0458 T0590 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0458 T0663 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045970089 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045970190 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045970198 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045970204 | 7/18/2012 | Clear | None | Clear | No | . 3 | 7.6 | 26 | 0 | 0 | . 1 | . 1 | 0 |
| 0459 T0209 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 045970288 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0459 T0403 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0460 T0016 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0460 T0109 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0460 T 0143 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 046070236 | 6/28/2012 | Clear | None | Clear | No | . 2 | 7.1 | 17 | 0 | 0 | 0 | . 6 | . 25 |
| 0460 T0305 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0460 T0306 | 6/28/2012 | Clear | None | Clear | No | . 1 | 7.9 | 17 | 0 | 0 | 0 | . 4 | 0 |
| 0460 T0487 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0460 T0526 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0460 T0585 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0461 T0183 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0461 T0208 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0461 T0330 | 6/6/2012 | Clear | None | Clear | No | . 8 | 6.9 | 16 | 0 | 0 | 0 | . 6 | 0 |
| 0461 T0351 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0461 T0352 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0461 T0413 | 6/15/2012 | Clear | None | Clear | No | . 1 | 8.0 | 17 | 0 | 0 | 0 | . 1 | . 25 |
| 0461 T0417 | 6/15/2012 |  |  |  |  | 0 |  | 1 |  |  |  |  |  |
| 0461 T0418 | 6/15/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0462 T0076 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0462 T0117 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\square}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0462 T0334 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0471 T0162 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0471 T0505 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0471 T0531 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0471 T0535 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472T000A | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0170 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0185 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0360 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0459 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0466 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0537 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0541 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0608 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0611 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0614 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0472 T0648 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0014 | 2/13/2012 | Clear | None | Clear | No | . 23 | 7.8 | 10 | 0 | 0 | 0 | . 1 | 0 |
| 0477 T0242 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0350 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0373 | 4/30/2012 | Clear | None | Clear | No | . 1 | 7.7 | 12 | 0 | 0 | 0 | . 4 | 0 |
| $0477 T 0377$ | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0379 | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0386 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0393 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0395 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0398 | 5/16/2012 | Clear | None | Clear | No | 1.1 | 7.4 | 13 | 0 | 0 | . 8 | 0 | 25 |
| 0477 T0410 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0416 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0477 T0440 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 047711184 | 5/16/2012 | Clear | None | Clear | No | . 1 | 7.3 | 15 | 0 | 0 | 0 | . 6 | . 25 |
| 0478 T0391 | 4/13/2012 | Clear | None | Clear | No | . 2 | 7.5 | 10 | 0 | 0 | 0 | . 8 | . 25 |
| 0478 T0882 | 4/13/2012 | Clear | None | Clear | No | . 1 | 7.8 | 10 | 0 | 0 | 0 | . 2 | 0 |
| 0478 T0909 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0478T0949 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0478T1002 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 047970025 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 047970153 | 2/27/2012 | Clear | None | Clear | No | . 3 | 7.8 | 12 | 0 | - | 0 | . 1 | . 25 |
| 047970830 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0481 T0098 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0481 T0113 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0481 T0261 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0482 T0232 | 2/27/2012 |  |  |  |  | 0 |  |  | + |  |  |  |  |
| 0482 T0256 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0493 T0020 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0493 T0022 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0493 T0045 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0535 T0006 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0535 T0115 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0535 T0172 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 053570194 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 053570199 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0537 T 0159 | 8/30/2012 | Clear | None | Clear | No | . 1 | 7.2 | 21 | 0 | 0 | . 1 | . 1 | 0 |
| 0538 T0250 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0538 T 0278 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0538 T0284 | 9/25/2012 | Clear | None | Clear | No | . 4 | 7.6 | 19 | 0 | 0 | 0 | . 2 | 0 |
| 053870333 | 7/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 053970020 | 8/15/2012 | Clear | None | Clear | No | . 1 | 7.7 | 22 | 0 | 0 | 0 | . 1 | . 25 |
| 053970027 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 053970139 | 7/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 053970266 | 7/1/2012 | Clear | None | Clear | No | . 1 | 7.4 | 19 | 0 | 0 | 0 | . 8 | . 25 |
| 053970276 | 7/1/2012 | Clear | None | Clear | No | . 1 | 7.9 | 15 | 0 | 0 | 0 | . 1 | . 25 |
| $0540 T 0001$ | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0541 T0104 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0541 T0105 | 5/15/2012 | Clear | None | Clear | No | . 9 | 8.2 | 19 | 0 | 0 | 0 | . 2 | 0 |
| 0541 T0164 | 5/17/2012 | Clear | None | Clear | No | . 39 | 7.9 | 19 | 0 | 0 | 0 | . 2 | . 25 |
| 0544 T 0108 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0544 T0173 | 11/9/2012 | Clear | None | Clear | No | N/M | 7.5 | 12 | 0 | 0 | 0 | . 6 | . 25 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0544 T0190 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0544 T0242 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0544 T0644 | 7/31/2012 | Clear | None | Clear | No | . 11 | 7.6 | 20 | 0 | 0 | 0 | . 2 | . 25 |
| 0544 T0791 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0544 T 1146$ | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0068 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0085 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0510 | 8/23/2012 | Clear | None | Clear | No | . 3 | 8.0 | 22 | 0 | 0 | . 6 | 0 | 0 |
| 0545 T0522 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0528 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0529 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0545 T 0539$ | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0545 T 0579$ | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0602 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0631 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0662 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0663 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0666 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0677 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0704 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0754 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0803 | 9/25/2012 | Clear | None | Clear | No | . 2 | 7.8 | 19 | 0 | 0 | . 1 | . 1 | 0 |
| 0545 T 0920 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0545 T0921 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0546T0013 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0546 T 0022$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0546 T 0116$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0546 T 0130$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0546 T 0144$ | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0546 T 0166$ | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0547 T0019 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548T0011 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0044 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0142 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0548 T0153 | 5/11/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0548 T0164 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0196 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0210 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T 0277 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0283 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0358 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 054870406 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548T0453 | 6/26/2012 | Clear | None | Clear | No | . 1 | 7.5 | 13 | 0 | 0 | 0 | . 4 | 0 |
| 0548 T0463 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0466 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0548 T0468 | 5/7/2012 | Clear | None | Clear | No | . 1 | 7.8 | 13 | 0 | 0 | 0 | . 2 | . 25 |
| 0548 T0604 | 5/7/2012 | Clear | None | Clear | No | . 1 | 7.7 | 12 | 0 | 0 | 0 | . 4 | . 25 |
| 0548 T0655 | 5/7/2012 | Clear | None | Clear | No | . 1 | 8.0 | 13 | 0 | 0 | 1.0 | 0 | 0 |
| 054970352 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 054970354 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 054970403 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0550 T0026 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 055070145 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0550 T 0411$ | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 055070470 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 055070496 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 055170278 | 4/12/2012 | Clear | None | Clear | No | . 1 | 7.3 | 10 | 0 | 0 | 0 | . 2 | 0 |
| 0551 T0326 | 4/12/2012 | Clear | None | Clear | No | . 1 | 6.9 | 10 | 0 | 0 | 0 | . 2 | 0 |
| 0551 T0367 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 055170376 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0551 T0395 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0551 T0398 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0551 T0437 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 055170442 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0551 T0458 | 6/6/2012 | Clear | None | Clear | No | . 2 | 7.0 | 14 | 0 | 0 | 0 | . 6 | . 25 |
| $0560 T 0016$ | 4/3/2012 | Clear | None | Clear | No | . 3 | 8.2 | 10 | 0 | 0 | 0 | . 1 | . 25 |
| $0560 T 0017$ | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0560 T 0320$ | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0561 T0064 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T0067 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T 0127 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T0194 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T0195 | 5/17/2012 | Clear | None | Clear | No | . 1 | 7.1 | 13 | 0 | 0 | 0 | . 4 | . 25 |
| 0561 T0196 | 4/20/2012 | Clear | None | Clear | No | . 2 | 8.2 | 11 | 0 | 0 | . 1 | . 2 | . 25 |
| 0561 T0246 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T0526 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T0547 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T0557 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561T0559 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0561 T0560 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0562 T0047 | 5/23/2012 | Clear | None | Clear | No | . 2 | 6.9 | 16 | 0 | 0 | 0 | . 4 | . 25 |
| 0562 T0492 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0562 T0581 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0562 T0762 | 5/17/2012 | Clear | None | Clear | No | . 2 | 7.3 | 12 | 0 | 0 | 0 | . 3 | 0 |
| 0562T1006 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0562T1081 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0562 T 1085 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0562T1092 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0562 T 1098 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0568 T0583 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0568 T0736 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0568 T 0795 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0568 T0805 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0568 T 0859 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0569 T0061 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0569 T0167 | 3/27/2012 | Clear | None | Clear | No | . 2 | 8.0 | 10 | 0 | 0 | 0 | 0 | . 25 |
| 0569 T0177 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0569T0189 | 3/27/2012 | Clear | None | Clear | No | . 3 | 8.5 | 9 | 0 | 0 | 0 | . 4 | . 25 |
| 0569 T0257 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 056970370 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 056970384 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 056970753 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0573 T0083 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0584 T0006 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0586 T 0072 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0589T0045 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0589 T0055 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0589 T0059 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 058970064 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0634 T0249 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0634 T0252 | 8/30/2012 | Clear | None | Clear | No | . 13 | 7.2 | 20 | 0 | 0 | 0 | . 1 | . 25 |
| 0635 T 0210 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0636 T 0176 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0193$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0258$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0260$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0284$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0285$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0292$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0304$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0636 T0366 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0384$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0636 T 0403 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0636 T 0438 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0453$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0497$ | 7/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0636 T 0549$ | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0636 T0554 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0636 T0662 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0636T0689 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0119 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0403 | 4/11/2012 | Clear | None | Clear | No | . 1 | 8.1 | 8 | 0 | 0 | 0 | . 3 | . 25 |
| 0640T0415 | 4/11/2012 | - |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640T0429 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T 0432 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T 0434 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0640 T0466 | 5/18/2012 | Clear | None | Clear | No | . 1 | 7.5 | 13 | 0 | 0 | 0 | . 3 | . 25 |
| $0640 T 0501$ | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0510 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0621 | 7/31/2012 | Clear | None | Clear | No | . 5 | 8.0 | 19 | 0 | 0 | 0 | . 1 | . 25 |
| 0640 T0629 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0643 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0946 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0977 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0996 | 7/31/2012 | - |  |  |  | 0 |  |  |  |  |  |  |  |
| 0640 T0997 | 7/31/2012 | Clear | None | Clear | No | N/M | 7.9 | 22 | 0 | 0 | 0 | . 1 | . 25 |
| 0641 T0090 | 4/11/2012 | Clear | None | Clear | No | . 3 | 7.8 | 8 | 0 | 0 | . 8 | . 4 | . 25 |
| 0641 T0095 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0641 T0099 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0641 T0840 | 4/11/2012 | Clear | None | Clear | No | . 1 | 7.7 | 8 | 0 | 0 | 0 | . 3 | 0 |
| 0641 T0907 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642T000A | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0072 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0076 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T 0077 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T 0084 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T 0112 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T 0426 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0642 T 0473$ | 7/30/2012 | Clear | None | Clear | No | . 1 | 6.8 | 20 | 0 | 0 | 0 | . 4 | 0 |
| 0642 T0582 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0606 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0625 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0651 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0685 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0692 | 9/13/2012 | Clear | None | Clear | No | . 3 | 7.7 | 22 | 0 | 0 | . 1 | . 2 | 0 |
| 0642 T0695 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0642 T 0718$ | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0642 T0719 | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0646T000A | 5/11/2012 | Clear | None | Clear | No | 1.36 | 7.0 | 14 | 0 | 0 | 0 | . 2 | 0 |
| 064770001 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0647 T0030 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0647 T0081 | 4/12/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0647 T0393 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0647 T0395 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0647 T0419 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0647 T0900 | 5/30/2012 | - |  |  |  | 0 |  |  |  |  |  |  |  |
| 0647 T0949 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0648 T 0110 | 6/5/2012 | Clear | None | Clear | No | . 2 | 7.1 | 17 | 0 | 0 | 0 | . 6 | . 25 |
| 0648 T0578 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0648 T0649 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0648 T0704 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 064870733 | 6/5/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 0648 T0745 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 064970004 | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 064970017 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0649 T0183 | 6/5/2012 | Clear | None | Clear | No | . 11 | 7.4 | 17 | 0 | 0 | . 1 | . 1 | . 25 |
| $0660 T 0292$ | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0660 T0340 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0660 T0469 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0660 T 0471$ | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0660 T 0492$ | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 066070498 | 5/23/2012 | Clear | None | Clear | No | . 1 | 7.9 | 16 | 0 | 0 | . 6 | 0 | 0 |
| 0660 T0515 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0660 T 0516$ | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0660 T 0548$ | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0660 T 0552$ | 4/20/2012 | Clear | None | Clear | No | . 1 | 7.8 | 12 | 0 | 0 | 0 | . 6 | . 25 |
| 066070589 | 5/23/2012 | Clear | None | Clear | No | . 1 | 7.5 | 18 | 0 | 0 | 0 | . 6 | . 25 |
| $0660 T 0817$ | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0660 T 0820$ | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 066070822 | 4/20/2012 | Clear | None | Clear | No | . 1 | 7.9 | 12 | 0 | 0 | 0 | . 6 | . 25 |
| 0661 T0051 | 5/17/2012 | Clear | None | Clear | No | . 2 | 7.3 | 13 | 0 | 0 | . 1 | . 2 | . 25 |
| 0661 T0081 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0741 T0163 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0741 T0546 | 9/26/2012 |  |  |  |  | 0 |  | 2 |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0741 T0602 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0741 T0603 | 12/17/2012 | Clear | None | Clear | No | N/M | 7.1 | 11 | 0 | 0 | 0 | 1 | . 25 |
| 0741 T0681 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0741 T0707 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0741 T0732 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0743 T0045 | 5/17/2012 | Clear | None | Clear | No | N/M | 7.4 | 21 | 0 | 0 | 0 | . 2 | . 25 |
| 0743 T0483 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0743 T0614 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0744 T0017 | 7/18/2012 | Clear | None | Clear | No | N/M | 7.7 | 24 | 0 | 0 | 0 | 0 | 0 |
| 0744 T0035 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0744 T0086 | 7/18/2012 | Clear | None | Clear | No | N/M | 8.2 | 24 | 0 | 0 | 0 | 0 | 0 |
| 0744 T0098 | 7/18/2012 | Clear | None | Clear | No | N/M | 8.2 | 27 | 0 | 0 | 0 | 0 | 0 |
| 0745 T0207 | 2/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0745 T0248 | 7/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0745 T0367 | 7/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0745 T0370 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0745 T0403 | 2/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0745 T0404 | 2/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0746 T 0118$ | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0746 T 0235$ | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0746 T 0288$ | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0746 T 0408$ | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0747 T0055 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0747 T0064 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0747 T 0096 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0747 T0120 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0747 T0330 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0753 T0055 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0753T0161 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0753 T0287 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0753 T0324 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0753 T0357 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0753 T0389 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0753 T0470 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0754 T0027 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0852 T0615 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0852 T 0620 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0853 T0148 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0853 T 0173$ | 8/22/2012 | Clear | None | Clear | No | N/M | 7.8 | 20 | 0 | 0 | 0 | . 02 | 0 |
| $0853 T 0356$ | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0853 T0361 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0853T0386(N | 12/17/2012 | Clear | None | Clear | No | N/M | 7.1 | 9 | 0 | 0 | 0 | 0 | 0 |
| 0853T0386(S | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0853 T0387 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0853T0388(N | 8/22/2012 | Clear | None | Clear | No | N/M | 7.4 | 20 | 0 | 0 | 0 | . 2 | 0 |
| 0853T0388(S | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0853 T 0392$ | 8/22/2012 | Clear | None | Clear | No | . 3 | 8 | 22 | 0 | 0 | 0 | . 02 | . 25 |
| $0853 T 0397$ | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0853 T 0411$ | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0853 T0425 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0853 T 0435$ | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0853 T 0492$ | 12/17/2012 | Clear | None | Clear | No | N/M | 7.0 | 9 | 0 | 0 | 0 | 0 | . 25 |
| $0853 T 0498$ | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0853 T0691 | 12/17/2012 | Clear | None | Clear | No | 0.1 | 7.1 | 13 | 0 | 0 | 0 | 0 | 0 |
| $0854 T 0009$ | 10/5/2012 | Clear | None | Clear | No | . 5 | 7.2 | 18 | 0 | 0 | 0 | . 6 | . 25 |
| $0854 T 0019$ | 10/5/2012 | Clear | None | Clear | No | . 2 | 7.1 | 18 | 0 | 0 | 0 | . 2 | . 25 |
| 0854 T0054 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0854 T 0056$ | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0854 T 0079$ | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0120 | 2/23/2012 | Clear | None | Clear | No | . 1 | 8.0 | 6 | 0 | 0 | . 3 | 0 | 0 |
| 0854 T0122 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0184 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0359 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0406 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0421 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0465 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0466 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0854 T0509 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L. | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0854 T0572 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0005 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0097 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0100 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T 0151 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T 0169 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0209 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0257 | 10/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0259 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0352 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0855 T0358 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0856 T0433 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0856 T0434 | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0856 T0483 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0856 T 1126$ | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0183 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0184 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0194 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0202 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0204 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0221 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 085710289 | 7/23/2012 | Clear | None | Clear | No | . 3 | 7.8 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 0857 T0302 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0389 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0469 | 2/22/2012 | Clear | None | Clear | No | . 1 | 7.5 | 6 | 0 | 0 | . 1 | 0 | . 25 |
| 0857 T0471 | 2/22/2012 | Clear | None | Clear | No | . 1 | 7.0 | 6 | 0 | 0 | 0 | . 4 | . 25 |
| 0857 T0478 | 2/22/2012 | Clear | None | Clear | No | . 1 | 7.8 | 5 | 0 | 0 | 0 | 0 | 0 |
| 0857 T0627 | 7/23/2012 | Clear | None | Clear | No | . 1 | 7.9 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 0857 T0631 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0632 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0674 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0676 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0688 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T0938 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0857 T 1259 | 7/24/2012 | Clear | None | Clear | No | N/M | 7.7 | 22 | 0 | 0 | 0 | . 1 | 0 |
| 085711266 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0857 T 1276 | 7/23/2012 | Clear | None | Clear | No | . 1 | 7.3 | 21 | 0 | 0 | 0 | . 1 | . 0 |
| 0857 T1327 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0023 | 7/18/2012 | Clear | None | Clear | No | N/M | 7.1 | 24 | 0 | 0 | . 6 | . 1 | 0 |
| 0858 T0035 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0042 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0051 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0109 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0236 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0237 | 2/22/2012 | Clear | None | Clear | No | N/M | 7.6 | 6 | 0 | 0 | 0 | . 3 | 0 |
| 0858 T0257 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0259 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0262 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0275 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T 0280 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T0317 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T 0370 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0858 T 0492 | 2/22/2012 | Clear | None | Clear | No | . 1 | 7.4 | 7 | 0 | 0 | . 1 | 0 | 0 |
| 0973 T0686 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0973 T0713 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0973 T 0748$ | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0974 T0031 | 12/17/2012 | Clear | None | Clear | No | N/M | 7.3 | 9 | 0 | 0 | 0 | . 1 | 0 |
| 0974 T0306 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0974 T0543 | 12/17/2012 | Clear | None | Clear | No | . 1 | 7.2 | 9 | 0 | 0 | 0 | 0 | 0 |
| $0976 T 0157$ | 8/2/2012 | Clear | None | Clear | No | N/M | 7.9 | 21 | 0 | 0 | 0 | . 1 | 0 |
| $0976 T 0171$ | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $0976 T 0185$ | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0977 T0039 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0977 T0055 | 5/15/2012 | Clear | None | Clear | No | N/M | 7.6 | 16 | 0 | 0 | 0 | . 2 | 0 |
| 0977 T0138 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0977T0296 | 5/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 097770329 | 8/2/2012 | Clear | None | Clear | No | N/M | 7.7 | 21 | 0 | 0 | 0 | 0 | 0 |
| 097770381 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 0977 T0384 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 097770939 | 5/17/2012 | Clear | None | Clear | No | . 18 | 7.9 | 18 | 0 | 0 | 0 | . 1 | . 25 |
| 0977 T0953 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 097771107 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T0194 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T0357 | 5/7/2012 | Clear | None | Clear | No | N/M | 6.8 | 15 | 0 | 0 | 0 | . 1 | 0 |
| 0978 T0391 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T0550 | 7/19/2012 | Clear | None | Clear | No | N/M | 7.5 | 27 | 0 | 0 | 0 | . 1 | . 25 |
| 0978 T0693 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T0694 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T0757 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T0971 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978T1061 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T1066 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T1088 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978T1281 | 2/1/2012 | Clear | None | Clear | No | . 1 | 7.7 | 8 | 0 | 0 | 0 | . 2 | . 25 |
| 097871283 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0978 T1284 | 2/1/2012 | Clear | None | Clear | No | . 1 | 7.3 | 7 | 0 | 0 | 0 | . 8 | . 25 |
| 0978 T1415 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0019 | 7/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 097970097 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0253 | 7/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0418 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0422 | 4/10/2012 | Clear | None | Clear | No | N/M | 6.9 | 10 | 0 | 0 | 0 | . 6 | . 25 |
| 0979 T0425 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0428 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0515 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 097970518 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0521 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0523 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979T0686 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0695 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0979 T0748 | 5/18/2012 | Clear | None | Clear | No | . 1 | 7.5 | 15 | 0 | 0 | . 1 | . 2 | . 25 |
| $1106 T 0190$ | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| $1106 T 0199$ | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1106 T 0333 | 8/3/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $1106 T 0764$ | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $1106 T 0795$ | 5/7/2012 | Clear | None | Clear | No | N/M | 6.8 | 14 | 0 | 0 | 0 | 0 | 0 |
| $1106 T 0820$ | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $1106 T 0836$ | 7/11/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| $1106 T 0913$ | 5/7/2012 | Clear | None | Clear | No | . 1 | 6.9 | 17 | 0 | 0 | 0 | 0 | . 25 |
| $1106 T 0952$ | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $1106 T 0998$ | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1106T1006 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1106T1069 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1106T1095 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1107 T 0138 | 1/31/2012 | Clear | None | Clear | No | . 2 | 7.4 | 8 | 0 | 0 | . 1 | . 4 | . 25 |
| 110770144 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1107 T 0270 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1107 T 0310 | 4/10/2012 | Clear | None | Clear | No | . 2 | 6.9 | 8 | 0 | 0 | 0 | . 3 | . 25 |
| 1107 T0581 | 4/18/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 110770586 | 4/18/2012 | Clear | None | Clear | No | . 16 | 7.6 | 13 | 0 | 0 | 0 | . 1 | 0 |
| 1107 T 1234 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1107T1235 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110771238 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110771241 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1107 T 1476 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110771484 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110771533 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| $1107 T 1581$ | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110771585 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1108 T0106 | 2/1/2012 | Clear | None | Clear | No | N/M | 7.6 | 6 | 0 | 0 | 0 | . 6 | . 25 |
| 1108 T 0184 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1108 T 0216 | 4/10/2012 | Clear | None | Clear | No | . 4 | 7.2 | 8 | 0 | 0 | 0 | . 4 | . 25 |
| 1108 T0226 | 4/10/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 1108 T 0760 | 4/11/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| 1108 T0764 | 2/1/2012 |  |  |  |  | 0 |  | mer |  |  |  |  |  |
| 1108 T0811 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | ${ }^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| 1108 T 1179 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110871196 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110871204 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110871205 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 110871216 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1108T1223 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1108 T 1226 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1108T1232 | 4/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1108 T 1275 | 1/31/2012 | Clear | None | Clear | No | N/M | 8.2 | 4 | 0 | 0 | 0 | . 6 | . 25 |
| 110970016 | 4/10/2012 | Clear | None | Clear | No | . 1 | 8.0 | 8 | 0 | 0 | . 1 | . 2 | 0 |
| $1236 T 0035$ | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244T0029 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244 T0119 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244 T0139 | 7/11/2012 | Clear | None | Clear | No | N/M | 7.3 | 22 | 0 | 0 | 0 | 0 | 0 |
| 1244 T0202 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244 T0220 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244 T0237 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244 T0257 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244 T0258 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1244T1003 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T 0276 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0379 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0383 | 1/31/2012 | Clear | None | Clear | No | . 1 | 7.5 | 6 | 0 | 0 | 0 | . 4 | . 25 |
| 1245 T0415 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0455 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0539 | 7/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0612 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0616 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0619 | 4/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 1245 T0666 | 7/11/2012 | Clear | None | Clear | No | . 2 | 7.8 | 21 | 0 | 0 | 0 | . 1 | . 25 |
| 167T000B | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC105 | 2/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC108 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC109 | 11/16/2012 | Clear | None | Clear | No | . 5 | 8.3 | 11 | 0 | 0 | 1.0 | . 6 | . 25 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL <br> SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| AC110 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC112 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC113 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC115 | 6/8/2012 | Clear | None | Clear | No | . 2 | 7.3 | 16 | 0 | 0 | 0 | . 6 | . 25 |
| AC116 | 6/8/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| AC122 | 11/28/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| AC123 | 4/10/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| AC124 | 4/10/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| AC125 | 4/10/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| AC126 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC127 | 7/18/2012 |  |  |  |  | 0 |  | -1 |  |  |  |  |  |
| AC128 | 7/18/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| AC129 | 8/7/2012 |  |  |  |  | 0 |  | $=$ |  |  |  |  |  |
| AC130 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC131 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC132 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC133 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC134 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC135 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC136 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC137 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC138 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC139 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC14 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC140 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC141 | 5/31/2012 | Clear | None | Clear | No | . 1 | 7.5 | 14 | 0 | 0 | 0 | . 8 | . 25 |
| AC142 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC143 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC144 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC145 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC146 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC147 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC148 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC149 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| AC150 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC151 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC152 | 1/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC153 | 11/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC154 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC155 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC156 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC157 | 7/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC158 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC159 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC160 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC161 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC162 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC163 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC164 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC165 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC166 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC167 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC168 | 8/2/2012 | Clear | None | Clear | No | . 2 | 6.9 | 23 | 0 | 0 | 0 | . 8 | 0 |
| AC169 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC170 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC171 | 8/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC18 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC19 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC2 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC20 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC21 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC25 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC26 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC28 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC29 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC3 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC32 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC34 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| AC35 | 3/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC36 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC37 | 10/10/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC4 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC46 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC48 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC49 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC5 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC50 | 5/29/2012 |  |  | - |  | 0 |  |  |  |  |  |  |  |
| AC51 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC52 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC53 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC55 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC56 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC57 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC58 | 11/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC59 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC60 | 11/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC61 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC63 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC64 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC68 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC69 | 5/29/2012 |  |  |  |  | 0 |  | * |  |  |  |  |  |
| AC70 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC75 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC76 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC8 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC87 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC88 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC90 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC91 | 9/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC92 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC94 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC95 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| AC96 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC97 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| AC99 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD 16 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD10 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD12 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD13 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD14 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD15 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD20 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD21 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD22 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD23 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD24 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD25 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD26 | 4/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD33 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD34 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD35 | 12/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD36 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD37 | 2/28/2012 | Clear | None | Clear | No | . 1 | 7.9 | 4 | 0 | 0 | 0 | . 2 | . 25 |
| BD39 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD40 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD41 | 2/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD42 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BD5 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW1 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW100 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW101 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW102 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW103 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  | . |
| BW104 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW105 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW106 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW111 | 3/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW112 | 3/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW113 | 3/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW114 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW115 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW120 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW125 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW126 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW127 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW128 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW133 | 10/1/2012 | Clear | None | Clear | No | N/M | 7.8 | 18 | 0 | 0 | 0 | . 4 | . 25 |
| BW14 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW143 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW144 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW145 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW146 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW147 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW148 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW149 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW15 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW150 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW151 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW152 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW153 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW154 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW155 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW160 | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW168 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW169 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW17 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW172 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW174 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW175 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW179 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW18 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW180 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW181 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW182 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW19 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW191 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW192 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW193 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW194 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW195 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW198 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW199 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW2 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW20 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW200 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW205 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW206 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW207 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW208 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW209 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW21 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW213 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW215 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW216 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW217 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW218 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW22 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW221 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW222 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW223 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW224 | 6/5/2012 | Clear | None | Clear | No | . 6 | 7.6 | 15 | 0 | 0 | 0 | . 4 | 0 |
| BW225 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW226 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW227 | 6/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW23 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW231 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW232 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW233 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW234 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW236 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW237 | 3/30/2012 | Clear | None | Clear | No | . 1 | 8.3 | 7 | 0 | 0 | 0 | . 2 | . 25 |
| BW238 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW239 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW24 | 11/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW240 | 3/27/2012 | Clear | None | Clear | No | . 2 | 8.0 | 10 | 0 | 0 | 0 | . 1 | . 25 |
| BW241 | 3/27/2012 |  |  |  |  | 0 |  | ${ }^{\circ}$ |  |  |  |  |  |
| BW242 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW243 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW246 | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW247 | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW248 | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW249 | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW25 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW250 | 10/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW251 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW255 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW256 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW257 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW258 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW259 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW26 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW260 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW261 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW262 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW263 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW264 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW265 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW266 | 2/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW267 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW268 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW269 | 5/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW27 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW270 | 5/11/2012 | Clear | None | Clear | No | . 1 | 7.2 | 15 | 0 | 0 | 0 | . 2 | 0 |
| BW271 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW272 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW273 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW274 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW275 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW276 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW277 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW278 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW279 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW280 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW281 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW282 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW283 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW284 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW285 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW286 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW287 | 6/14/2012 | - |  |  |  | 0 |  |  |  |  |  |  |  |
| BW288 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW289 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW290 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW291 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW292 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW293 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW294 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW295 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW296 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW298 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW299 | 7/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW3 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW300 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW301 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW302 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW303 | 4/30/2012 | Clear | None | Clear | No | N/M | 7.5 | 12 | 0 | 0 | 0 | . 6 | . 25 |
| BW304 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW305 | 6/4/2012 |  |  |  |  | 0 |  |  |  | - |  |  |  |
| BW306 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW307 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW308 | 4/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW309 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW310 | 5/30/2012 |  |  |  |  | 0 |  | , |  |  |  |  |  |
| BW311 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW312 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW313 | 6/5/2012 | Clear | None | Clear | No | . 6 | 7.2 | 16 | 0 | 0 | 0 | . 1 | . 25 |
| BW315 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW316 | 10/25/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| BW317 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW318 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW319 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW320 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW321 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW322 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW323 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW324 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW325 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW326 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW327 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW328 | 7/19/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW329 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW33 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW330 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW331 | 5/21/2012 |  |  |  |  | 0 |  | = |  |  |  |  |  |
| BW332 | 4/17/2012 |  |  |  |  | 0 |  | e |  |  |  |  |  |
| BW333 | 5/21/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl 2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW334 | 5/29/2012 | Clear | None | Clear | No | . 1 | 7.2 | 17 | 0 | 0 | 0 | . 6 | 0 |
| BW335 | 5/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW336 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW337 | 7/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW338 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW339 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW34 | 11/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW340 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW341 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW342 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW343 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW344 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW345 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW346 | 6/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW347 | 6/5/2012 |  |  |  |  | 0 |  | $\checkmark$ |  |  |  |  |  |
| BW348 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW349 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW35 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW350 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW351 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW352 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW353 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW354 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW355 | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW356 | 4/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW357 | 4/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW358 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW359 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW360 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW361 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW362 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW363 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW364 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW365 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  | 4 | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW366 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW367 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW368 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW369 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW37 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW370 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW371 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW372 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW373 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW38 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW4 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW43 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW45 | 7/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW47 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW48 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW49 | 6/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW54 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW55 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW57 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW58 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW59 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW60 | 4/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW61 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW62 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW63 | 5/30/2012 | Clear | None | Clear | No | . 1 | 6.9 | 14 | 0 | 0 | 0 | . 6 | 0 |
| BW64 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW65 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW66 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW67 | 6/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW68 | 4/9/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| BW70 | 8/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW71 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW72 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW73 | 4/25/2012 | Clear | None | Clear | No | . 1 | 7.4 | 11 | 0 | 0 | . 8 | 0 | 0 |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| BW74 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW75 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW76 | 6/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW77 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW78 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW79 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW80 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW81 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW82 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW83 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW87 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW9/20 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW90 | 10/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW92 | 10/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW97 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW98 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| BW99 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL100 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL101 | 8/1/2012 | Clear | None | Clear | No | . 3 | 8.0 | 24 | 0 | 0 | . | . 2 | 0 |
| OL102 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL103 | 10/5/2012 | Clear | None | Clear | No | . 1 | 7.4 | 18 | 0 | 0 | 0 | . 2 | . 25 |
| OL104 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL107 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL108 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL109 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL111 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL112 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL114 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL115 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL116 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL117 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL118 | 8/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL119 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0 OL120 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| OL121 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL122 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL123 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL124 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL125 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL126 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL127 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL128 | 5/31/2012 | Clear | None | Clear | No | N/M | 8.4 | 18 | 0 | 0 | 0 | . 1 | . 25 |
| OL129 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL130 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL131 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL132 | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL133 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL134 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL135 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL138 | 8/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL139 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL14 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0 O140 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL141 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0 L 42 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL143 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL144 | 3/23/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |
| OL145 | 5/31/2012 | Clear | None | Clear | No | N/M | 8.4 | 18 | 0 | 0 | 0 | . 1 | 0 |
| OL147 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL148 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL149 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL15 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL150 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL151 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0 L152 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL153 | 8/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL154 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0 L155 | 8/15/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| OL156 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL157 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL16 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL160 | 5/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL161 | 5/7/2012 | Clear | None | Clear | No | N/M | 7.1 | 17 | 0 | 0 | 0 | . 1 | 0 |
| OL162 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL163 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL164 | 4/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL165 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL166 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL167 | 4/25/2012 | Clear | None | Clear | No | N/M | 7.6 | 10 | 0 | 0 | 0 | . 1 | 25 |
| OL168 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL169 | 8/1/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL17 | 6/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL170 | 12/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL173 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL174 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL175 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL177 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL178 | 9/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL18 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL181 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL182 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL183 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL184 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL185 | 8/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL186 | 3/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL187 | 9/26/2012 |  |  |  | - | 0 |  |  |  |  |  |  |  |
| OL188 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL19 | 5/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL190 | 9/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL191 | 5/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL192 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0 O193 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{aligned} & \text { OIL } \\ & \text { SHEEN } \end{aligned}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| OL194 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL195 | 8/2/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL196 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL197 | 7/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL198 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL199 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL200 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL201 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL202 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL203 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL204 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL205 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL206 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL207 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL208 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL209 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL21 | 8/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL210 | 9/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL211 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL25 | 2/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL27 | 8/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL28 | 3/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL3 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL31 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL33 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL34 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL44 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL46 | 10/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL48 | 11/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL5 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL50 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL51 | 9/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL53 | 8/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL58 | 9/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| OL60 | 8/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL61 | 8/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL62 | 8/17/2012 | Clear | None | Clear | No | N/M | 7.7 | 18 | 0 | 0 | 0 | . 1 | 0 |
| OL72 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL73 | 8/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL76 | 5/30/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL8 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL80 | 11/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL81 | 5/23/2012 | Clear | None | Clear | No | . 22 | 7.7 | 17 | 0 | 0 | 0 | . 1 | 0 |
| OL82 | 5/21/2012 | Clear | None | Clear | No | . 37 | 8.2 | 20 | 0 | 0 | 0 | . 1 | 25 |
| OL83 | 5/23/2012 | Clear | None | Clear | No | . 4 | 8.4 | 19 | 0 | 0 | 0 | . 1 | 0 |
| OL84 | 9/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL85 | 3/7/2012 | Clear | None | Clear | No | N/M | 8.2 | 9 | 0 | 0 | . 1 | . 1 | 0 |
| OL86 | 8/16/2012 | Clear | None | Clear | No | N/M | 8.0 | 21 | 0 | 0 | 0 | . 1 | 0 |
| OL87 | 8/31/2012 | Clear | None | Clear | No | N/M | 8 | 18 | 0 | 0 | 0 | . 1 | . 25 |
| OL88 | 7/31/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL9 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL90 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL91 | 4/24/2012 | Clear | None | Clear | No | . 55 | 7 | 10 | 0 | 0 | 0 | 0 | . 25 |
| OL92 | 4/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| 0193 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL94 | 3/27/2012 | Clear | None | Clear | No | . 23 | 7.6 | 16 | 0 | 0 | 0 | . 1 | 0 |
| 0 L95 | 5/21/2012 | Clear | None | Clear | No | N/M | 8.1 | 20 | 0 | 0 | 0 | . 1 | 0 |
| OL96 | 8/7/2012 | Clear | None | Clear | No | 7.9 | 8.6 | 18 | 0 | 0 | 0 | 0 | 25 |
| 0 O97 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL98 | 2/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| OL99 | 6/4/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC10 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC102 | 11/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC103 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC105 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC108 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC123 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC124 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | $\mathrm{mg} / \mathrm{L}$ |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| SC126 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC13 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC134 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC135 | 5/14/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC136 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC14 | 4/20/2012 | Clear | None | Clear | No | N/M | 7.2 | 15 | 0 | 0 | 0 | . 1 | 0 |
| SC143 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC15 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC153 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC154 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC157 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC158 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC162 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC163 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC164 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC165 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC166 | 5/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC169 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC177 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC178 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC179 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC182 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC185 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC186 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC187 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC191 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC192 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC193 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC194 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC195 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC196 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC197 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC198 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC199 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| SC215 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC216 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC228 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC23 | 6/28/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC232 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC233 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC234 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC235 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC237 | 9/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC243 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC244 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC245 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC246 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC250 | 6/26/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC251 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC252 | 4/9/2012 | Clear | None | Clear | No | N/M | 6.9 | 12 | 0 | 0 | 0 | . 4 | 0 |
| SC253 | 3/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC255 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC258 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC259 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC274 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC275 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC276 | 2/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC278 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC279 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC28 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC280 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC281 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC282 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC283 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC284 | 6/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC285 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC288 | 5/25/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC289 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| SC29 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC290 | 5/22/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC291 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC297 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC298 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC299 | 12/13/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC301 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC302 | 6/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC305 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC308 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC309 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC310 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC311 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC313 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC313 | 4/9/2012 | Clear | None | Clear | No | N/M | 6.9 | 14 | 0 | 0 | 0 | . 2 | . 25 |
| SC314 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC315 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC316 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC317 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC318 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC319 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC32 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC320 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC321 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC322 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC323 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC324 | 5/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC325 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC326 | 11/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC327 | 11/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC328 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC329 | 11/8/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC33 | 11/9/2012 |  |  |  |  | 0 |  | E |  |  |  |  |  |
| SC330 | 11/19/2012 |  |  |  |  | 0 |  | - |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| SC331 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC332 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC333 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC334 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC335 | 10/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC336 | 10/12/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC337 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC34 | 11/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC341 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC342 | 3/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC343 | 3/5/2012 | Clear | None | Clear | No | . 2 | 7.8 | 8 | 0 | 0 | 0 | . 1 | . 25 |
| SC344 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC348 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC350 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC351 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC352 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC353 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC354 | 4/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC355 | 9/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC356 | 9/5/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC358 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC359 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC360 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC361 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC362 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC363 | 3/29/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC364 | 2/7/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC365 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC366 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC367 | 4/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC368 | 12/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC369 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC370 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC371 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | OIL SHEEN | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $\mathrm{C}^{0}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| SC372 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC373 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC374 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC375 | 12/3/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC376 | 3/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC379 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC380 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC381 | 12/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC382 | 8/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC383 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC384 | 9/11/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC385 | 6/21/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC386 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC387 | 5/18/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC388 | 8/6/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC389 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC4 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC46 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC50 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC51 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC54 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC59 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC62 | 12/20/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC74 | 11/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC77 | 9/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC79 | 11/15/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC86 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC89 | 5/16/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC9 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC91 | 5/24/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC93 | 4/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC98 | 10/17/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| SC99 | 10/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC1 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |


| NODEID | DATE | COLOR | ODOR | TURBIDITY | $\begin{gathered} \text { OIL } \\ \text { SHEEN } \end{gathered}$ | FLOW | pH | TEMP | CU | PHENOLS | Cl2 | NH3 | DET |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UNITS |  |  |  |  |  | cfs |  | $C^{\circ}$ | mg/L | mg/L | mg/L | mg/L | mg/L |
| LIMITS |  |  |  |  |  |  | 6.5-9.0 |  | 0.01 | 1.5 | 1 | 2.5 | 1 |
| WC12 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC13 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC14 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC15 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC16 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC17 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC18 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC19 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC2 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC20 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC21 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC22 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC23 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC26 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC27 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC28 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC29 | 2/27/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC30 | 4/9/2012 | Clear | None | Clear | No | . 1 | 7.9 | 10 | 0 | 0 | 0 | . 3 | . 25 |
| WC31 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC32 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC33 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC34 | 3/23/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC5 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC6 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC7 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |
| WC8 | 4/9/2012 |  |  |  |  | 0 |  |  |  |  |  |  |  |

# 2012 Illicit Discharge <br> Investigation Summary 

| Date | Name / Company |
| :---: | :---: |
| Reported | Address |
| 1/11/2012 | Calgon Carbon 835 N. Cassady Avenue, Columbus, OH 43219 |
| 1/26/2012 | YRC <br> 5400 Fisher Rd. Columbus, OH $43228$ |
| 1/26/2012 | Homeowner 2886 Valleyview Dr Columbus OH 43204 |
| 2/3/2012 | TNT Powerwash Inc. 708 Internet Drive, Columbus, OH 43207 |

## Cause

Overhead piping hit by an overloaded truck tearing down the process water and city water line.

Accidental spill of detergent at terminal during heavy rain event, Clean up efforts were hampered by rain and some product made it to a CB on the lot and entered the MS4.

Leak in septic tank at 2886 Valleyview Drive migrating to 2900 Valleyview and being discharged to street by sump pump.

Washing cars at car dealer, some use of inlet protection, but the mats were not in place when we arrived.

Washing and detailing cars using a mobile power wash truck outside the business garage bay. No inlet protection or containment of wash water.

Paint removal from the front wall of the business. Scrubbing walls with paint stripper and rinsing with a hose.

Foul smelling groundwater pooling within the park area. No entry into MS4.

## Resolution

Did not enter MS4.

Area was cleaned up. Detergent that entered MS4 was held up in ditch by cattails at railroad tracks, diluted, and dissipated. Mike Dalton, OEPA concurred with that assessment.

Health Department had residents at 2886 Valleview Drive repair septic system.

Ordered employees to stop washing. Explained the violation and gave copies of C.C. 1145.75 and Power Wash Memo. NOVRAP 3/27/12

Explained the violation and gave copies of C.C. 1145 and the Power Wash Memo. Ordered that the washing stop until a violation could be prevented. NOV-RAP 3/14/12

Explained the violation and gave copies of C.C. 1145.75 and the Power Wash Memo. This was a combined sewer area. Employees were told to contain any discharge. NOV-RAP 3/12/12

Took sample to the Surveillance Lab at Fairwood, results showed traces of oils. Notified Metro Parks.

Distributed We All Live Downstream and C.C. 1145.75 . Followed-up on $3 / 5 / 12$ with Mr Hale and area was cleaned.

# 2012 Illicit Discharge 

## Investigation Summary

| Date | Name / Company | Cause | Resolution |
| :---: | :---: | :---: | :---: |
| Reported | Address |  |  |
| 3/6/2012 | City of Columbus/ Design and Construction 1800 E 17th Ave, Columbus, OH $43219$ | The new water line that was installed had been backfilled with reclaim 304 and would leach out reclaim 304 residue through a old broken $8^{\prime \prime}$ clay storm during rain events. | City Design and Construction corrected the problem. |
| 3/15/2012 | Unknown | Report of an oil sheen on Alum Creek at the Jewish Center foot bridge on $3 / 14 / 12$. | Checked Alum Creek from Rt. 70 bridge north to Livingston Avenue, no oil was seen. |
| 4/3/2012 | Rave Cinemas 1071 Gemini Place Columbus OH | Leaking trash compactor. | Distributed C.C. 1145.75 and explained violation. Establishment contacted Waste Management to replace unit. NOV-RAP 4/24/12 |
| 4/9/2012 | Kenny-Oboyashi JV <br> 2020 Jackson Pike, Columbus, <br> OH 43223 | Failure to maintain sediment BMP's onsite and direct pumping into the MS4. | Onsite personnel cleaned the sediment out of the open channel and outfall area. Discharge into the river was clear as of 04/20/2012. NOV-RAP 6/4/12 |
| 4/13/2012 | Utilicon Corporation 888 E. 70th Street, Cleveland, OH 44103 | Cleaning water main during relining project, pumped out material into the curb line. A sediment bag was used but not properly sealed on the discharge line. | Ordered immediate cleanup of sludge in the curb line and catch basin. NOV-RAP 4/30/12 |
| 4/19/2012 | A.E.P. <br> 850 Tech Center Dr, Gahanna, <br> OH 43230 | Transformer failed and leaked oil into the storm lines. This area is in Upper Arlington but outfalls at 4374 Stimson Dr in Columbus. | Once we found the source, we checked outfall and stream. Oil had dissipated. Sent a email and called Upper Arlington Public Service Department to explain our findings. |
| 4/24/2012 | Unknown | Ditch maintenance crew found foul smelling water in a ditch along Sunbury. We found 10 ppm ammonia and traced the sewage into a 10-12 inch storm sewer upstream. | 3992 Glenoak had a aerator connection in a manhole. Turned over to Columbus Health Department. |
| 4/25/2012 | Unknown | Sewage in a $12^{\prime \prime}$ storm sewer going North along Maize Road. | We were able to narrow the discharge to four possible homes. Unable to determine which system was failing. Turned over to Columbus Health Department. |

# 2012 Illicit Discharge 

## Investigation Summary

## Date

Reported
4/30/2012

5/3/2012

5/10/2012

5/10/2012

Name / Company
Address 3600 Interchange Rd, Columbus, OH 43204

Columbus Division of Water 3967 Elkton Street, Columbus, OH 43207

Sunny Isle Apariments/ CSN Realty 136 Brighton Avenue, Deal, NJ 07723-1279

Cause

Report of a white substance in the stream behind 4298 Maize Road.
outfall.

Trash dumpster leaking where it connects to the compactor causing sludge and liquids to get on the parking lot. Material did not enter storm sewer.

City received a call on 05/09/2012 about a green substance in the stream behind 947 Forest Creek Drive East.

Residents saw a sudden discharge of liquid from a $24^{\prime \prime}$ outfall behind the condos. Discharge lasted about 15 minutes, Neighborhood Association leaders took photos and called police

Power washing parking lot to remove staining, no containment of wash water.

## Resolution

Crew saw nothing in the stream or in storm sewer upstream of

Store Manager informed us that they are changing out trash vendors and getting equipment fixed. They cleaned area with oil dry and scraped up material.

Stream was clear. No signs of pollution.

City Complaints Section traced the discharge to an inlet near 2233 Hedgerow. When we arrived the next day, there was no evidence of any discharge.

Explained violation and distributed C.C. 1145.75 and Power Wash Memo to the Manager. NOV-RAP 6/7/12

Notified Leak Detection. They said that the neighborhood has an issue with faulty service lines.

Washing machine connected to the sump pump causing water to discharge into the street. Dye test confirmed the source.

Private lateral sewer backup. Maintenance staff pumped a flooded basement utility room into a parking lot inlet to allow access to the blockage.

Advised resident to disconnect the laundry discharge from the sump pump and connect it to sanitary sewer. Follow-up, laundry discharge is now connected to the sanitary sewer. NOV-RAP 6/25/12

We explained the violation, management was aware of the issue and admitted fault NOVRAP 8/7/12

## 2012 Illicit Discharge

## Investigation Summary

## Name / Company

Address

## Date

Reported

6/19/2012

7/11/2012

Local Waste
1300 S. Columbus Airport Rd, Columbus, OH 43207

Marzetti
1709 Frank Rd, Columbus, OH 43223

## Cause

Found a strange looking substance floating on the water below a dry weather sampling location. Source seemed to be a blind connection into a culvert at Manor Park Drive.

Call from OEPA about an oil sheen coming from a flap gate outfall in North Bank Park. Stormwater and Pretreatment Sections responded.

12" Sanitary line tapped into structure 0053 T 3089 which is a storm line. Sanitary line comes from Hitchcock Hall.

Received a report of a sewage discharge at 2322 Sunbury Road. This address does not have a visible connection to the storm sewer, but the discharge from 2300 Sunbury Road tested 10 ppm for ammonia with staining consistent with sewage.

Yard waste dumped along a creek channel near 3090 Scioto Trace. Resident said that this was not her property, and that the yard waste had been moved to that spot by someone else.

Employees were washing sidewalks.

Trash truck blew a hydraulic line and spilled the fluid at several spots, including a large puddle at the intersection of Corporate Exchange and Cooper Rd.

Exhaust fan from processing area pulling milk powder onto roof. Milk powder with condensate from HVAC units entered roof drain and into MS4.

## Resolution

Boomed the creek, took a sample for the lab and notified OEPA. The culvert was not part of the MS4 and turned over to the OEPA.

No sheen was visible on the water when we arrived, only a light biological film. Searched up and down from the bank, no oil sheen seen.

Gave our findings to Ohio State University and they disconnected the sanitary line from the storm line.

Columbus Health Department had resident correct problem.

Made resident aware of C.C. 1111 prohibiting dumping into or on the banks of streams. Left educational material. Resident voluntarily did cleanup of the stream banks.

Distributed 1145.75, and explained proper disposal methods. NOV-RAP 8/10/12

Local Waste cleaned up the spill using sand and oil dry to absorb the fluid. Checked outfall, no discharge to Alum Creek.

Explained to the company that this a violation of C.C. 1145.75 and that the problem needed addressed. Company performed clean-up. NOV-RAP 9/10/12

## Investigation Summary

Date
Reported

8/30/2012

9/4/2012

9/4/2012

9/7/2012

| 9/28/2012 | Unknown |
| :--- | :--- |
| $10 / 5 / 2012$ | Brandon Emmons Chapman <br> 6312 Ambleside Dr. Columbus, <br> OH 43229 |
|  | Dirt 4 U <br> 5075 Refugee RD Baltimore, <br> OH 43105 |

10/17/2012

Name / Company
Address

## Unknown

Cautela Cement
7069 Worthington Galena Rd
Worthington, OH 43085

Goo Goo Carwash 2202 Polaris Parkway,
Columbus, OH 43240

5075 Refugee RD Baltimore, OH 43105

DanCor Inc 2155 Dublin Rd Columbus, OH 43228

Cause

Report of a green slick on a retention pond that may have originated from pipe outfall.

Cleaned up concrete work area with broom and water, no containment on catch basin.

Detergents getting into storm line when
business is brush washing cars over storm inlet

## Business owner dumped mop water into curb inlet. Owner admitted to doing this.

 This inlet goes to a combined sewer.| Storm sewer construction crew on Olentangy |
| :--- |
| River Road noticed sewage and |
| green dye in the sewer when they pulled |
| out a temporary bulkhead. The bulkhead |
| had been installed on $9 / 25$ to keep |
| their work site dry during rains. |


| No sewage detected and no flow |
| :--- | :--- |
| in the storm sewer. |


| Mr. Chapman poured used motor oil down |
| :--- |
| a storm inlet. |


| Mr. Chapman contacted |
| :--- |
| a environmental company |
| cleaning company to clean the |
| affected area. Mr. Tatman, Solid |
| Waste Inspector for City is |
| handling enforcement. |


| Saw cutting slurry pushed into curb inlet |
| :--- |
| during clean-up. |


| Inlet was vactored and curb |
| :--- |
| cleaned. Distributed copy of C.C. |


| 1145.75. NOV-RAP 11/6/12 |
| :--- |

Dry weather sampling of outfall 0080T0111 detected strong sewage concentration. Upstream tracking revealed that discharge of sewage was occurring from Dancor aerator.

## Resolution

We determined that the substance was a blue-green algae bloom, not an illicit discharge.

Explained City Code 1145.75.
No muddy water was visible at the outfall. Cautela cleaned up work area. NOV-RAP 9/11/12

Gave company a copy of 1145.75 and We All Live Downstream. NOV-RAP 11/12/12

Gave business owner a copy of 1145.75, We All Live Downstream and Outdoor Cleaning Activities. NOV-RAP 10/5/12

Mr. Chapman contacted environmental company cleaning company to clean the Waste Inspector for City is handling enforcement.

Inlet was vactored and curb C.C. 1145.75. NOV-RAP 11/6/12

Notified Kathryn Madden of Columbus Health Department of the discharge e-mail on 10/18/12.

## 2012 Illicit Discharge

## Investigation Summary

Name / Company
Address

## Date

Reported 10/22/2012 10/22/2012 10/23/2012

Unknown
SC Wash and Tan
1400 N. High Street, Columbus,
OH 43201

Tony Ricos On-the-Go 616 E Whittier Columbus, OH 43206

Mach I Auto Care
6631 Guinevere Drive
Columbus, OH 43229

IMO Builders
14920 Empire Rd. Thornville OH 43076

Homeowner
1275 Carolwood, Columbus, OH 43227

## Cause

Detail shop washing cars on lot and water running into curb and inlet.

Flushing radiator with hose (after draining coolant) and washing auto engine.
Wash water going across the driveway into the street

JMO Builders was spraying water to control dust. They were not using inlet protection. The construction run-off entered our MS4.

Complaint from citizen stating that resident at 1275 Carolwood was stuffing leaves into catch basin in front of house.

Contractor painting for 470 Village Drive washed out equipment near the creek. Discharge was reported by downstream neighbors.

Power washing sidewalks outside the store with plain water, no containment. Wash water going through the parking lot into the street.

Evidence of paint washout found during dry weather sampling. Resident at the house admitted that his brother spilled paint on a car mat and washed it out at the curb.

Private lateral backup caused release of sewage from the cleanout into the parking lot area.

## Resolution

Distributed City Code 1145.75
and ordered shop to stop washing. NOV-RAP 11/28/12

Ordered work to stop, cleanup performed. Explained and distributed C.C. 1145.75. NOVRAP 11/30/12

JMO personnel were informed they needed to use inlet protection. We informed them about City Code 1145.75 and they received a copy of same. NOV-RAP 11/1/12

Checked inlets in front of 1275
Carolwood and found no leaves in storm sewer.

Since the discharge was directly to State waters, turned investigation over to Wes Drake of OEPA when he arrived.

Ordered the work to stop, explained the violation and C.C. 1145.75. Employee said he would contain wash water and direct it to a grassy area. NOVRAP 12/13/12

Explained and distributed C.C.
1145.75 and educational material. Cleaned up stained leaves below the outfall. Reinstalled a storm drain marker on the inlet. RFVC-12/17/12

Could not determine if MS4 was affected, no flow. Roto Rooter had unclogged the leak on $11 / 27 / 12$. Apartment maintenance cleaned up solids near the cleanout.

## Investigation Summary

## Date

Reported

Starcraft Construction 2711 S Old State Rd, Galena, Oh 43201

## Cause

Power washing paint off old building. Employees of Starcraft Construction were not using inlet protection. Paint chips and milky white residue entered our MS4

We found high volume flow of City water in both structure 0127S0424 and structure 0127T0423. Chlorine level was 2.0 in storm. Sanitary flow in storm.

Received a complaint that someone was dumping floor scrubbing wash water into a City sewer inlet at 590 Cassady Avenue.

## Resolution

We informed Starcraft about C.C. 1145.75 and they received a copy of same. We placed inlet protection around affected catch basins. NOV-RAP 12/17/12

Contacted leak detection on 12 -12-12. Service request \#1217060. Followed up on 01-042013. Will dye test when water leak fixed.

We found nothing in the sewer inlet. Talked to the cleaning company and distributed
C.C. 1145.75 and the Outdoor

Washing Memo.

Service Request No.
1217368
*1217368*

Created Date: 12/18/2012 08:55 PM

## CLOSEOUT INFORMATION



Oracte
Report s_rpi138 v 17153-3.


Service Request No.
Created Date: 12/18/2012 08:55 PM

## 1217368

*1217368*

## WORK LOCATION



Problem Description: cols fire called, they have responded to a call of gasoline in the sewer.

| Requested Date: | Crew: BOWJ1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0029 |
| Dispatcher: BOBO, DAVID.L |  | Call Back Ready: N |
| Status: CLOSED |  | Customer Call Back: N |
| WO/Task No: |  | Finished Date: 12/18/2012 11:02:10PM |

## CUSTOMER INFORMATION

| Stomer ID: | Bill Customer: N |  |
| ---: | :---: | ---: |
| Name: | Ext: | Customer Call Back: N |
| Work Phone: |  | Home Phone: |
| Company: | Tax ID: |  |

REPORTED BiY

| Name: cols fire |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: |  | State: |

Service Request No. 1216087

## *1216087*

Created Date: 11/21/2012 03:52 PM 08:03 AM

## CLOSEOUT INFORMATION

## Start: 11/21/2012 04:15 PM

Finish: 11/21/2012 04:30 PM
Completed: $Y$
Failure: YNCF
Repair: YNOREPAIR Further Action: $\qquad$
Comments: CHECKED $12 \times 6$ CULVERT T2943 FOUND NO SHEEN VISIBLE ON WATER.

Inspected By: MBOYD/DMARTIN
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C

Date: $21-\mathrm{NOV}-12$
Date: $\qquad$
Date: 29-NOV-12

SPECIFICATIONS


| Address: MAIN ST | Suite: |  |
| :---: | :---: | :---: |
| Cross Street: CIVIC CENTER DR |  |  |
| City: | State: $\quad$ Zip: |  |
| Service Request Type: INVESTIGATE |  |  |
| Problem Code: YSPILL - Non-water spill; chemical, fuel, etc. |  |  |

Problem Description: E.P.A, reported a visible oil sheen on the river coming from one of the pipes at the Main St. bridge.

| Requested Date: | Crew: BOYM1 | Dept: SEWERS | Area: 0001 |
| :---: | :---: | :---: | :---: |
| Next Approver: |  |  |  |
| Dispatcher: SCOTT, MARCIA R | Call Back Ready: N |  |  |
| Status: CLOSED | Customer Call Back: N |  |  |
| WOTTask No: | Finished Date: 11/28/2012 08:12:48AM |  |  |

## CUSTOMER INFORMATION

| tomer ID: |  | Bill Customer: N |
| ---: | ---: | ---: |
| Name: | Ext: | Customer Call Back: N |
| Work Phone: |  | Home Phone: |
| Company: |  | Tax ID: |

## REPORTED BY

| Name: Foster, Mike |  |  |
| :---: | :---: | :---: |
| Address: |  | Call Back: $N$ |
| City: |  | Suite: |
| Work Phone: (614) $645-7075$ | Ext: | State: |
| Zip: |  |  |

## Oracle

Report s_pt138 v 17153-3

SPECIFICATIONS


Oracle
Report s_rpl138 v 17153-3

# Service Request No. <br> 1216061 <br> *1216061* 

Created Date: 11/21/2012 10:12 AM Finish: 11/21/2012 10;50 AM

Completed: $Y$
Start: 11/21/2012 10:05 AM
Further Action: YCCTV
Failure: YMHOP
Repair: YJETTED
Comments: YSSO3 Engineered sanitary overflow number 206 was found overflowing during routine inspection @ 10:05 am. The 8 inch sanitary sewer was stopped up at upstream manhole \# 0039s0292. The sewage entered the storm system from the engineered overflow in manhole number 0039s0293. Attempts to contain the sewage at manhole \# 0039 ț0268 with sandbags were unsuccessful. Sewer was opened with a vactor (Dave Parquet) and overflow ended at 10:50 am. Distpatch was notifled. Signs and door hangers were not placed at the site because the sewage was contained in the storm system. Signage exists at the discharge location, structure number 0040t0076. Need to have one section of sanitary sewer telemonitered from upstream Mh\#0039s0293 to Mh\#0039s0292, to check condition of sewer. last recorded overflow was 10/10/12.

Inspected By:Link/Davey
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C

Date: 21-NOV-12
Date: $\qquad$
Date: 17-JAN-13

SPECIFICATIONS

| ID: | 1215211 | Category: DOSD WORK DAT | Type: WIB-MSS | Title: WATER IN BASEMENT - MAIN SEW |
| :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute |  | Value |
|  | 80 | TV TO \# |  |  |
|  | 5 | CHECKED FROM STRUCTURE \# |  |  |
|  | 70 | CLEAN TO\# |  |  |
|  | 65 | CLEAN FROM \# |  |  |
|  | 60 | WORK SEQUENCE |  |  |
|  | 50 | TENENT NOTIFIED? |  |  |
|  | 45 | TENENT WATER DRAINED $Y$ |  |  |
|  | 40 | OPEN V $=$ VAC R=ROD H=HAND |  |  |
|  | 35 | CAUSE $=$ UNKNOWN Y |  |  |
|  | 30 | CAUSE = OTHER? |  |  |
|  | 25 | CAUSE $=$ DEBRIS $Y$ |  |  |
|  | 20 | CAUSE = ROOTS $Y$. |  |  |
|  | 15 | CAUSE $=$ GREASE $Y$ |  |  |
|  | 10 | CHECKED TO STRUCTURE\# |  |  |
|  | 75 | TVFROM \# . |  |  |
| ID: | 1215212 | Category: DOSD WORK DA1 | Type: SSO-CSO | Title: SSO-SCO DATA |
|  | Seq. No | Attribute |  | Value |
|  | 75 | RECEIVING STRUCTURE \# |  | 003910268 |
|  | 70 | TIME/DATE OVERFLOW STOPPED |  | 11/21/12@10:50 |
|  | 65 | SECURE $1=$ SIGN $2=$ HANGER $3=$ OTHER |  |  |
|  | 60 | SUMP PUMP ADDRESS |  |  |
|  | 55 | OVERFLOW AFFECTED AREA? |  | -; |
|  | 50 | CAUSE $=$ UNKNOWN $-Y$ |  | Y |
|  | 45 | CAUSE $=$ OTHER? |  |  |

-.eated Date: 11/21/2012 10:12 AM
Service Request No. 1216061
*1216061*
WORK LOCATION

Address: BRUCK ST Cross Street: REEB AVE

City:

Suite:

State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YUPFLOW - Flow from ground or structure.
Problem Description: OVER FLOW

| Requested Date: | Crew: LINM1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0039 |
| Dispatcher: WHITE, JANICE L |  | Call Back Ready: N |
| Status: CLOSED |  | Customer Call Back: N |
| WO/Task No: $1234008 / 01$ |  | Finished Date: 11/23/2012 07:28:38AM |

CUSTOMER INFORMATION

| ristomer ID: |  | Bill Customer: N |
| ---: | ---: | ---: |
| Name: | Ext: | Customer Call Back: N |
| Work Phone: |  | Home Phone: |
| Company: | Tax ID: |  |

REPORTED BY

| Name: DAVEY, MIKE |  |  | Call Back: $N$ |
| :---: | :---: | :---: | :---: |
| Address: |  |  | Suite: |
| City: S |  |  | State: |
| Work Phone: | $\therefore$ | Ext: |  |
| Zip; |  |  |  |

Oracle
Report s_rpl138 v 17153-3

Service Request No.
Created Date: 11/12/2012 09:23 AM
1215550

## *1215550*

CLOSEOUT INFORMATION



Service Request No.
1215550
*1215550*

WORK LOCATION

Address: zzz-see description
Cross Street:

## City:

Suite:
State:
Service Request Type: INVESTIGATE

Service Request Type: INVESTIGATE

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: ON 270 EASTBOUND AT THE EXIT RAMP AT 23 TRUCK TURNED OVER. LOST 80 GAL OF GAS INTO DITCH. FIRE DEPT IS ON SIGHT, PLEASE RESPOND. RON STEWARD WANTS YOU TO RESPOND TO MAKE SURE THIS ISN'T GETTING INTO OUT STORM SEQWERS.

| Requested Date: |  | Crew: ENGS1 |
| :--- | :--- | :--- |
| Next Approver: | Dept: SEWERS | Area: 0204 |
| Dispatcher: BOBO, DAVID L |  | Call Back Ready: N |
| Status: CLOSED |  | Customer Call Back: $N$ |

CUSTOMER INFORMATION

| stomer ID: | Bill Customer: $N$ |
| ---: | :---: |
| Wame: | Ext: |
| Work Phone: | Customer Call Back: $N$ |
| Company: | Home Phone: |

REPORTED BY

| Name: LT. PEARSON |  | Call Back: N |
| :---: | :---: | :---: |
| Address: |  |  |
| City: |  | Suite: |
| Work Phone: $(614)$ 221-2345 | Ext: | State: |

Oracle
Report s_pt138 v 17153-3

Service Request No.
Created Date: 10/27/2012 01:45 AM
1214809
*1214809*
CLOSEOUTINFORMATION
Start: 10/27/2012 02:45 AM Finish: 10/27/2012 03:15 AM

Completed: $Y$
Faillure: YASSTAGNCY
Repair: $\qquad$ Further Action: YNFAN
Comments: Truck crash and diesel spill of about 100 gallons. Chris from the OHEPA was on site and did not require City assistance. Stormwater assets are ODOT and spill was into waters of the state.

Inspected By: Cobun/ Hoffman
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C
SPECIFICATIONS

| ID: | 1213897 | Category: DOSD WORK DAT | Type: SPILL | Title: SPILL DATA |
| :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute |  | Value |
|  | 5 | SPILL AFFECTED AREA? |  |  |
|  | 10 | CAUSE? |  | . |
|  | 15 | CONTAINED $Y$ |  |  |
|  | 35 | RECEIVING WATERWAY? |  |  |
|  | 25 | EPA ON SITE Y |  |  |
|  | 30 | RECEIVING STRUCTURE \# |  |  |
|  | 20 | STORMWATER NOTIFIED Y |  |  |

[^24]Oracle

## Suite:

Address: zzz-see description Cross Street: JAMES RD

City:
State: Zip:

Service Request Type: INVESTIGATE

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: sr 70 e bound at lest 100 gall dsl.

| Requested Date: | Crew: COBR1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: | Area: 0097 |  |
| Dispatcher: BEAVERS, RANDY W | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 10/28/2012 05:47:38PM |  |

## CUSTOMER INFORMATION

| tomer ID: |  |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: Customer: $N$ |  |

REPORTED BY

| Name: Fire Dept |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: zzz-see description |  | Suite: |
| City: | Ext: | State: |

Oracle
Report s.rpl138 $\vee$ 17153-3

Service Request No. 1214029
*1214029*

SPECIFICATIONS


## CLOSEOUT INFORMATION



SPECIFICATIONS


Created Date: 10/10/2012 10:22 AM
Service Request No. 1214029

## *1214029*

WORK LOCATION

| Address: BRUCK ST | Suite: |  |
| :---: | :---: | :---: |
| Cross Street: REEB AV | State: | Zip: |
| $\ldots \quad$ City: | Service Request Type: INVESTIGATE |  |
| Problem Code: YUPFLOW - Flow from ground or structure. |  |  |

Problem Description: OVERFLOW @ THE ABOVE INTERSECTION

| Requested Date: | Crew: DAVM1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0039 |
| Dispatcher: JONES, CRYSTALYN R | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: 1230055/01 | Finished Date: 10/11/2012 07:04:20AM |  |

## CUSTOMER INFORMATION

| tomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Ext: |
| Work Phone: | Customer Call Back: N |
| Company: | Home Phone: |

REPORTED BY

| Name: DAVEY, MIKE |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  |  |
| City: | Ext: | Suite: |
| Work Phone: |  |  |

## Oracle

Report s_pt138 v 17153-3

Service Request No.
1213965
*1213965*
CLOSEOUT INFORMATION


SPECIFICATIONS

| ID: | 1213335 | Category: DOSD WORK DAT | Typo: SPILL | Thle: SPILL DATA |
| :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute |  | Value |
|  | 5 | SPILL AFFECTED AREA? |  | private system |
|  | 10 | CAUSE? |  | broken hydraulic line |
|  | 15 | CONTAINED Y |  | $y$ |
| , | 35 | RECEIVING WATERWAY? |  | none contain in private system |
|  | 25 | EPA ON SITE Y |  | $y$ |
|  | 30 | RECEIVING STRUCTURE \# |  | 0029t1730 |
|  | 20 | STORMWATER NOTIFIED Y |  | y |

sated Date: 10/09/2012 01:55 PM

## WORK LOCATION

Address: 1191 FIELDS AVE
Cross Street:
City:

Suite:

State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: petrolium spill at the above location. (rumpke)--site contact person is Mark Ross (513-851-0122...ext 7257)

| Requested Date: | Crew: FANP2 | Dept: SEWERS |
| :--- | :---: | :---: |
| Next Approver: |  | Area: 0029 |
| Dispatcher: BOBO, DAVID L |  |  |
| $\quad$ Call Back Ready: N |  |  |
| WO/Task No: | Customer Call Back: N |  |

## CUSTOMER INFORMATION

| Customer ID: |  | Bill Customer: N |
| ---: | :---: | ---: |
| Name: | $\ddots$ | Customer Call Back: N |
| Work Phone: | $\ddots$ | Home Phone: |
| Company: |  | Tax ID: |

REPORTED BY

Name: David, murphy
Address:
City:
Work Phone: (513) 851-0122
Ext: 3161

Call Back: N
Suite:
State: Zip: Home Phone:

Oracla
Report s_rpt138 $\vee$ 17153-3

Created Date: 09/21/2012 10:16 AM
Service Request No.
1213215
*1213215*
CLOSEOUT INFORMATION


Created Date: 09/21/2012 10:16 AM
Service Request No.
1213215
*1213215*

WORK LOCATION

Address: 8164 zzz-see description
Cross Street:
City:

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: 8164 HAWKSWILLOW DR. CITIZEN HAS BEEN SEEING THE RESIDENT AT THIS ADDRES
LETTING CHEMICALS AND OIL FROM CAR ECT GOING DOWN INTO THE STORM SEWER

| Requested Date: | Crew: MYER1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0661 |
| Dispatcher: WHITE, JANICE L |  | Call Back Ready: N |
| Status: CLOSED. | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 09/24/2012 07:43:12AM |  |

## CUSTOMER INFORMATION.

| tomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Customer Call Back: N |
| Work Phone: | Home Phone: |
| Company: | Tax ID: |

REPORTED BY
REPORTED BY

| Name: BIEBEREN, JANA |  | Call Back: $N$ |  |
| :---: | :---: | :---: | :---: |
| Address: |  | Suite: |  |
| City: | Ext: |  | State: |
| Work Phone: $(614) 759-1516$ |  | Home Phone: |  |

## Oracle

Report s_rpt138 v 17153-3
$\qquad$
Repair: YCCAR
Further Action: YRAISESTRU
Comments: The spill of hydraulic oil in front of 5229 Wagon wheeel dr. got into storm inlet \#0378t0239. The amount looked to be less than 2 gallons. The EPA was on site commanding the clean up crews. We were needed to locate MH\# 0378t0240. This MH is located in the rear of 5221 Wagon wheel dr. and needs to be raised appx. 6 linches iñ dirt. Owier of propery gave verbal permission.

Inspected By: Fannin/Bowling
Signoff By:
Closed By:
$\qquad$
$\qquad$

Date: 19-SEP-12
Date: $\qquad$
Date: $\qquad$

SPECIFICATIONS


Oracle
Report s_rpt138 v 17153-3

## SERVICE REQUEST REPORT*

Service Request No.
1213104
*1213104*
Created Date: 09/19/2012 11:45 AM
WORK LOCATION

Address: 5229 WAGON WHEEL LN
Cross Street:
City: CONTRACTOR

Suite:

State: Zip: Service Request Type: INVESTIGATE

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: OK TO CLOSE AFTER WORK ORDER IS FINISHED.
PER CONTRACTOR A CITY
REFUSE WASTE HYDROLIC FUEL IN THE SEWER

| Requested Date: | Crew: FANP2 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0378 |
| Dispatcher: WHITE, JANICE L |  |  |
| Status: WORK ORDER Back Ready: $N$ |  |  |
| WO/Task No: 1227895/01 | Customer Call Back: N |  |

CUSTOMER INFORMATION

| tomer ID: | Bill Customer: N |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Comparyer Call Back: N |  |

REPORTED BY
REPORTED BY

| Name: HOMES, CHRIS |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: | Suite: |  |
| City: OHIO EPA-REPORT \# 2301 | State: | Zip: |
| Work Phone: $(800) 282-9378$ | Ext: |  |

Service Request No.
1211766
*1211766*

CLOSEOUT INFORMATION

|  | Start: 08/21/2012 01:30 PM | Finish: 08/2 | PMM | C |
| :---: | :---: | :---: | :---: | :---: |
|  | Failure: YCONT | Repair: YASBLTDONE | Further Action: Y |  |
|  | Comments: The spill had been contained when we arrived with a private storm system(cc146590). We inspected the outfall pipe and discovered no ccontaminants had reached that point. We informed the responsible party that they would be responsible for the clean up. They called saftey clean while we were on site. |  |  |  |
|  | Inspected By: Fannin/ Bowling |  | Date: 21-AUG-12 |  |
|  | Signoff By: | - | Date: |  |
|  | Closed By: RICHARDS, JEFFREY C |  | Date: 24-AUG-12 |  |


| ID: | 1211448 | Category: DOSD WORK DAT | Type: SPILL | Title: SPILL DATA |
| :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute |  | Value |
|  | 5 | SPILL AFFECTED AREA? |  | cc14659 |
|  | 10 | CAUSE? |  | Truck diesel fuel spill |
|  | 15 | CONTAINED Y |  | $y$ |
|  | 35 | RECEIVING WATERWAY? |  | none |
|  | 25 | EPA ON SITE Y |  | n |
|  | 30 | RECEIVING STRUCTURE \# |  | 124510541 |
|  | 20 | STORMWATER NOTIFIED Y |  | $y$ |

Service Request No.
1211766
*1211766*

WORK LOCATION

Address: 1500 GEMINI PL
Cross Street:
City:

## Suite:

State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: ABOUT 10 GALLONS OF FUEL SPILLED AROUND CB. FIRE DEPARTMENT WAS ABLE TO GET IT UP BUT WOULD LIKE TO HAVE SMOC TO CHECK AND MAKE SURE. MAYBE 2 GALLONS COULD HAVE SEEP THROUGH. (PLEASE SEE BILL AT THE FRONT DESK AT COSCO FOR MORE (NFORMATION)

| Requested Date: | Crew: FANP2 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 1108 |
| Dispatcher: WHITE, JANICE L | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 08/22/2012 07:55:54AM |  |

CUSTOMER INFORMATION

| 'stomer ID: | Bill Customer: $N$ |
| ---: | ---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |

REPORTED BY

| Name: COLUMBUS FIRE DEPARTMENT |  | Call Back: N |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: | State: | Zip: |
| Work Phone: (614) 221-2345 Ext: |  | Home Phone: |

## CLOSEOUT INFORMATION

| Start: 08/13/2012 12:15 PM Failure: YASSTAGNCY | Finish: 08/13/2012 01:15 PM |  | Completed: $Y$ |
| :---: | :---: | :---: | :---: |
|  | Repair: YNFWN | Further Action: |  |
| Comments: when we arrived at sr 315 and i 70 their was a accindent on the freeway the fire department said that the truck leak about 25 gal of diesel but if did not get Into the catchbasin on the freeway so we checked the catchbasin on the freeway and if was number t0037 and t0044 that we checked and e.p.a said that the trucking company going to do the clean and they going to call eel company to clean up and mike forster was notified |  |  |  |
| Inspected By: harris bill |  | Date |  |
| Signoff By: |  |  |  |
| Closed By: RICHARDS, JEFFREY C |  | Date: |  |

## SPECIFICATIONS



Service Request No.
1211357
*1211357*
Created Date: 08/13/2012 11:29 AM

Sulte:

State: Zip:
Service Request Type: INVESTIGATE
Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: COLUMBUS FIRE DEPT STATES A SEMI TRUCK FLIP OVER AND NASTY STUFF IS IN THE SEWER PLEASE INVESTIGATE

| Requested Date: | Crew: HARH1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0001 |
| Dispatcher: JONES, CRYSTALYN R |  |  |
| Status: CLOSED | Call Back Ready: N |  |
| WO/Task No: | Customer Call Back: N |  |

## CUSTOMER INFORMATION

| tomer ID: | Bill Customer: N |
| :---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Homer Call Back: N |

REPORTED BY

| Name: CFD |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: |  | State: |

## CLOSEOUT INFORMATION



## SPECIFICATIONS



Service Request No.

## WORK LOCATION

| Address: COOPER RD | Suite: |
| :---: | :---: |
| Cross Street: CORPORATE EXCHANGE DR | State: |
| City: | Sip: |
| Service Request Type: INVESTIGATE |  |
| Problem Code: YSPILL - Non-water spill; chemical, fuel, etc. |  |

Problem Description: CPD STATES AT THE ABOVE INTERSECTION THERE IS A POSSIBLE FUEL SPILL OF HYDRAULIC FLUIDS IN THE CB/STORM SEWER PLEASE INVESTIGATE , CPD IS ON SITE

| Requested Date: | Crew: LINM1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0642 |
| Dispatcher: JONES, CRYSTALYN R | Call Back Ready: Y |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 08/14/2012 07:44:28AM |  |

CUSTOMER INFORMATION

| nustomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone; |

REPORTED BY

| Name: TECH 114, CPD |  | Call Back: Y |  |
| :---: | :---: | :---: | :---: |
| Address: |  | Suite: |  |
| City: | Ext: | State: | Zip: |
| Work Phone: $(614) 645-4545$ |  | Home Phone: |  |

Refer to Illicit Discharge
Investigation 08/13/2012-1
Party: Local Waste
1300 S. Columbus Airport Rd. Columbus, OH 43207

Oracle
Report s.rpt138 v 17153-3

Service Request No.
Created Date: 08/05/2012 10:48 AM
1210932
*1210932*
CLOSEOUT INFORMATION

| Start: 08/05/2012 10:50 AM | Finish: 08/05/2012 11:50 AM |  | Completed: Y |
| :---: | :---: | :---: | :---: |
| Failure: YASSTAGNCY | Repair: YNFWN | Further Action: |  |
| Comments: THIS FUEL SPILL IS FROM TRANS AMERICA TRUCKING COMPANY. THEIR CLEAN UP CREW IS GOING TO DO THE CLEAN UP. FUEL DID GET INTO SLUICE GATE 4. MIKE DALTON THE EPA SITE COORDINATOR WAS ON SITE AND CONFIRMED THAT TRANSAMERICA WAS GOING TO DO THE CLEAN UP. MR, ELLINGER DID SHOW UP ON SITE AND.AND CALLED IN A PUMPHOUSE CREW. FUEL SPILL HAD STOPPED SPILLING JUST NEEDED CLEANED UP WHEN WE LEFT. |  |  |  |
| Inspected By: HOFFMAN/COBUN | Date: 05-AUG-12 |  |  |
| Signoff By: | Date: |  |  |
| Closed By: RICHARDS, JEFFREY C | Date: 07-AUG-12 |  |  |

## SPECIFICATIONS



Oracle
Report s_rpt138 v 17153-3

## veated Date: 08/05/2012 10:48 AM

Service Request No.
1210932
*1210932*
WORK LOCATION


Problem Description: 1-70 EAST BETWEEN MOUND STREET AND ROUTE 315 FUEL SPILL

| Requested Date: | Crew: HOFW1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next'Approver: |  | Area: 0001 |
| Dispatcher: STEWARD, RONALD L | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 08/06/2012 07:54:23AM |  |

CUSTOMER INFORMATION

| - stomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Customer Call Back: N |
| Work Phone: | Ext: |
| Company: |  |

REPORTED BY

| Name: FIRE DEPAERT |  |  | Call Back: $N$ |
| :---: | :---: | :---: | :---: |
| Address: | $\cdots$ | Suite: |  |
| City: |  | State: | Zip: |
| Work Phone: (614) $521-2345$ | Ext: |  | Home Phone: |

Oracle
Report s_rpt138 v 17153-3

Service Request No.
Created Date: 08/01/2012 07:34 AM 1210755
*1210755*

## CLOSEOUT INFORMATION

| Start: 08/01/2012 08:15 AM | Finish: 08/01/2012 10:45 AM |  | Completed: Y |
| :---: | :---: | :---: | :---: |
| Failure: YNISA | Repair: YNFWN | Furth |  |
| Comments: NO ASSET\# THIS IS A PRIVATE STORM SEWER IN THE OHIO STATE UNIVERSITY AREA SOME GREEN STUFF IN THE CREEK CALLED JACK VESCO CREW OUT TO TAKE SAMPLES OF CREEK WATER TO DETERMINE WHAT IT IS.. |  |  |  |
| Inspected By: SMITH/HOFFMAN | Date: 01-AUG-12 |  |  |
| Signoff By: | Date: |  |  |
| Closed By: RICHARDS, JEFFREY | Date: 03-AUG-12 |  |  |

SPECIFICATIONS


WORK LOCATION

Address: 1055 CARMACK RD
Cross Street:
City:

Suite:

| State: | Zip: |
| :---: | :---: |
| Service | Request Type: |
| INVESTIGATE |  |

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description:Mr. Taylor is with the E.P.A. He stated that the E.P.A. did not send anyone out to the site and that they would like for SMOC to take a look. He received a report of green dye flowing from a pipe into the creek.

| Requested Date: | Crew: SMIC1 | Dept: SEWERS |
| :--- | :---: | :---: | Area: 0051

CUSTOMER INFORMATION

| stomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Customer Call Back: N |
| Work Phone: | Home Phone: |
| Company: |  |

REPORTED BY

| Name: Taylor, Todd | Call Back: N |  |
| :---: | :---: | :---: |
| Address: | Suite: |  |
| City: | State: | Zip: |
| Work Phone: (614) $644-3198$ | Ext: |  |

Service Request No.
Created Date: 07/28/2012 04:11 PM
1210589
*1210589*

## CLOSEOUT INFORMATION

| Start: 07/28/2012 05:10 PM | Finish: 07/28/2012 05:40 PM | Completed: Y |
| :---: | :---: | :---: |
| Failure: YCONT | $\longrightarrow$ Furth | ST |
| Comments: Y spill truck and auto accident 20 gallons of disel entered into 0093 t0637 and 0093 t0634 all fuel was containted by columbus fire dept with absorbents sand there was no flow in storm sewer but residue was in manhole 0093 t0633 mr dalton epa was handling cleanup no further wor needed |  |  |
| Inspected By: yurkovic nagy | Date |  |
| Signoff By: |  |  |
| Closed By: RICHARDS, JEFFREY C | Date: |  |

## SPECIFICATIONS



Service Request No.
1210589
*1210589*
WORK LOCATION


Problem Description: auto acc diseil in cb

| Requested Date: | Crew: YURM1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0093 |
| Dispatcher: BEAVERS, RANDY W | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 07/30/2012 08:30:15AM |  |

CUSTOMER INFORMATION

| stomer ID: | Bill Customer: $N$ |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: |  |

REPORTED BY

| Name: fire dept |  | Call Back: N |
| :---: | :---: | :---: |
| Address: FIFTH AVE E |  | Suite: |
| City: | Ext: |  |
| Work Phone: |  | State: |

Oracle
Report s_pt138 $\vee$ 17153-3

# Service Request No. 

1209897
*1209897*

## CLOSEOUT INFORMATION

| Start: 07/16/2012 02:20 PM | Finish: 07/16/2012 02:50 PM Completed: Y |  |  |
| :---: | :---: | :---: | :---: |
| Failure: YNISA | Repair: YNFWN | Further Action: YREQST |  |
| Comments: YINL1- The storm inle potentially could be aff notified via radio dispa | 31870092 and \# 0 from the spill belo No further work n |  | p to 70E that ODOT was |

Inspected By: Engle / Cobun
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C

Date: 16-JUL-12
Date: $\qquad$
Date: 18-JUL-12
SPECIFICATIONS


Service Request No.
1209897
*1209897*
Created Date: 07/16/2012 02:07 PM

Suite:
Address: zzz-see description
Cross Street:
City:
State: Zip:
Service Request Type: INVESTIGATE
Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: southbound 270 turning onto the 70 eastbound entrance ramp a semi has overturned. cols fire is requesting us.

| Requested Date: | Crew: ENGS1 | Dept: SEWERS |
| :--- | ---: | :--- |
| Next Approver: |  |  |
| Dispatcher: BOBO, DAVID L | Call Back'Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 07/17/2012 07:45:21AM |  |

## CUSTOMER INFORMATION

| stomer ID: | Bill Customer: N |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: | Customer Call Back: N |
| Company: | Home Phone: |

## REPORTED BY

| Name: It. milier |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: | Ext: | State: |
| Work Phone: $(614)$ |  | Home Phone: |

Service Request No.
Created Date: 07/11/2012 03:46 AM
CLOSEOUT INFORMATION


## SPECIFICATIONS



Service Request No. 1209628 *1209628*

Lreated Date: 07/11/2012 03:46 AM
WORK LOCATION
Address: 1191 FIELDS AVE
Cross Street:
City:

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: Caller stated that a train derailed and that there was a spill in the area of the address given. Received a call back from Z007 stating that the crew should report to Command @ gate 17 (he belleves this is on 17th Ave.)

| Requested Date: | Crew: FANP2 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0029 |
| Dispatcher: SCOTT, MARCIAR | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back:N |  |
| WO/Task No: | Finished Date: 07/17/2012 07:56:23AM |  |

## CIUSTOMER INFORMATION

| tomer ID: | Bill Customer: N |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |

## REPORTED BY

| Name: Bush |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: C.F.C. |  | Suite: |
| City: |  | State: |

[^25]
## Oracla

Report s_pt138 $\vee$ 17153-3

Service Request No.

## Created Date: 06/21/2012 01:59 PM

CLOSEOUT INFORMATION


SPECIFICATIONS

| ID: | $1208729$ | Category: DOSD WORK DA7 | Type: SPILL | Title: SPILL DATA |
| :---: | :---: | :---: | :---: | :---: |
|  | 5 | SPILL AFFECTED AREA? |  |  |
|  | 10 | CAUSE? |  |  |
|  | 15 | CONTAINED Y |  |  |
|  | 35 | RECEIVING WATERWAY? |  |  |
|  | 25 | EPA ON SITE Y |  |  |
|  | 30 | RECEIVING STRUCTURE \# |  |  |
|  | 20 | STORMWATER NOTIFIED $Y$ |  |  |

created Date: 06/21/2012 01:59 PM
Service Request No. 1208129

## *1208129*

WORK LOCATION

| Address: WILLOW STE |  |
| :---: | :---: |
| Cross Street: LAZELLE ST | Suite: |
| Clity: Columbus | State: OH Zip: |
| Service Request Type: INVESTIGATE |  |
| Problem Code: YSPILL - Non-water spill; chemical, fuel, etc. |  |



| Requested Date: | Crew: MYER1 | Dept: SEWERS |
| :--- | :---: | :---: |
| Next Approver: |  | Area: 0005 |
| Dispatcher: ENGLE, STEPHEN J |  | Call Back Ready:N |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 06/21/2012 03:17:29PM |  |

## CUSTOMER INFORMATION

| stomer ID: | Blll Customer: N |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Customer Call Back: N |

REPORTED BY

| Name: Scranton, Mark | Call Back: N |
| :---: | :---: |
| Address: WILLOW STE | Suite: |
| City: Columbus | Ext: |

Oracle
Report s_fpl138 v 17153-3

Service Request No.
Created Date: 06/18/2012 12:10 PM
1207934
*1207934*

## CLOSEOUT INFORMATION

Start: 06/18/2012 12:24 PM
Finish: 06/18/2012 01:45 PM
Completed: Y
Failure: YASSTAGNCY
Repair: $\qquad$ Further Action: YNFAN
Comments: YSPILL - Appears to be testing dye from a 48 " storm outfall that serves the Bexiey area. Investigated, found Infratechnologies.com doing contract work for the City of Bexley using dye, and asked our dispatcher to notify EPA by phone. Gave the job boss the SMOC phone number and asked them to call before dye testing storm sewers as a courtesy.

Inspected By: Cobun/ Myers
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C

Date: 18-JUN-12
Date: $\qquad$
Date: 20-JUN-12

SPECIFICATIONS


Service Request No.
1207934
*1207934*
WORK LOCATION
Address: BROAD ST
Suite: Cross Street: NELSON RD

City:
State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YSPILL. - Non-water spill; chemical, fuel, etc.
Problem Description: EPA CALLED AND WOULD LIKE FOR YOU GUYS TO TAKE A LOOK IN THE CREEK TO SEE IF THE GREEN SUBSTANCE THAT WAS REPORTED TO THEM IS DYE OR ANTIFREEZE, NEEDS A CALL BACK WHEN COMPLETED THANKS

| Requested Date: | Crew: COBR1 |
| :--- | :---: |
| Next Approver: | Dept: SEWERS |
| $\quad$ Dispatcher: JONES, CRYSTALYN R | Call Back Ready: Y |
| $\quad$ Status: CLOSED | Customer Call Back: $N$ |
| WO/Task No: | Finished Date: 06/18/2012 03:06:54PM |

CUSTOMER INFORMATION

| Stomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Customer Call Back: N |
| Work Phone: | Ext: |
| Company: |  |

REPORTED BY

| Name: TODD |  | Call Back: Y |  |
| :---: | :---: | :---: | :---: |
| Address: |  | Suite: |  |
| City: EPA | State: | Zip: |  |
| Work Phone: (614) $644-3195$ | Ext: |  | Home Phone: |

Service Request No.
1207647
*1207647*
Created Date: 06/08/2012 11:46 AM

## CLOSEOUT INFORMATION

## Start: 06/08/2012 12:15 PM

Finish: 06/08/2012 12:30 PM
Completed; $Y$
Failure: YNYD
Repair: YNOWORKFND
Further Action: YNFAN
Comments: YSPILL - The location is at Bicentennial Park west of the reception building on a 72 inch outfall (T2570). The evidence of the contaminent was negligible and had dissipated.

Inspected By: RMyers/MBoyd
Signoff By:
Closed By: RICHARDS, JEFFREY C

SPECIFICATIONS



Problem Description: There is a discharge from one of our storm outfalls into the Scioto River, near Neil Ave., by a boat dock. Also, there is a glass building in the area. It's a 72' pipe with a gate. It appears that someone is dumping cooking grease into the storm drain. Please call Mr. Lauck if questions.

| Requested Date: | Crew: MYER1 | Dept: SEWERS |
| :--- | :---: | :---: | Area: 0002

## CUST̈OMER INFORMATION

| stomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |

## REPORTED BY

| Name: Lauck, Greg |  | Call Back: N |
| :---: | :---: | :---: |
| Address: E.P.A. |  | Suite: |
| City: | State: | Zip: |
| Work Phore: $(614) 644-3199$ | Ext: |  |

## Oracle

Report s_rpl138 v 17153-3

Service Request No.
1207251
*1207251*
Created Date: 05/31/2012 07:54 AM

Finish: 05/31/2012 09:30 AM
Completed: $Y$
Start: 05/31/2012 09:20 AM
Failure: YDIRTY
Repair: $\qquad$ Further Action: YCLEAN
Comments: The catch basin in front of 1153 Hildreth (T0996) needs to be cleaned and debris removed. There was garbage (paper plates, cups, etc.) found in the catch basin. No chemicals were able to be detected.

Inspected By: RMyers/MBoyd
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C

PECIFICATIONS


## Oracle

Report s_pl138 v 17153-3

Service Request No.
1207251
*1207251*

Created Date: 05/31/2012 07:54 AM

Suite:

Address: 1152 HILDRETH AVE
Cross Street:
City:

State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: CALLER SAID MAN IS DUMPING WASTE ILLEGALLY. IN THE SEWER AT THIS ADDRESS. PLEASE INVESTIGATE

| Requested Date: | Crew: MYER1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area:0014 |
| Dispatcher: JONES, CRYSTALYN R | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: 1216739/01 | Finished Date: 06/01/2012 06:52:04AM |  |

CUSTOMER INFORMATION

| stomer ID: | Bill Customer: N |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: | Customer Call Back: N |
| Company: | Home Phone: |

REPORTED BY

| Name: NO INFO |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: 311 COMPLAINT | Ext: | State: |
| Work Phone: |  | Home Phone: |

Service Request No.
1207171
*1207171*

SPECIFICATIONS


Service Request No.
Created Date: 05/29/2012 01:05 PM
1207171
*1207171*

## CLOSEOUT INFORMATION

Starț: 05/29/2012 01:45 PM
Finish: 05/29/2012 01:55 PM
Completed: $Y$
Fallure: YMHOP
Repair: YJETTED
Further Action: YCLEAN
Comments: YSSO3 \& Engineered sanitary overflow number 393 was found overflowing during routine inspection. The 24 inch combination sewer was stopped up between upstream manhole \# 0004 S 0527 and downstream manhole \# 0004S0529. The sewage entered the storm system from the engineered overflow in manhole number 0004S0527. Attempts to contain the sewage at manhole 00045527 were unsuccessful. Sewer was opened with a vactor and overflow ended at 1355 . Mike Foster was notified by Michael Davey. Signs and door hangers were not placed at the site because the sewage was contained in the storm system. Signage exists at the discharge locatlon, structure number 0001 t2942 The storm and sanitary sewers will be cleaned under service request number 1207171. Cause of overflow was unknown.

Inspected By:M Davey H Harris
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C

Date: 29-MAY-12
Date: $\qquad$
Date: 01-JUN-12

SPECIFICATIONS

| ID: | 1208128 | Category: DOSD WORK DAT | Type: WIB-MSS | Title: W | WATER IN BASEMENT - MAIN SEW |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute |  | Value |  |
|  | 80 | TVTO\# |  |  |  |
|  | 5 | CHECKED FROM STRUCTURE \# |  |  |  |
|  | 70 | CLEANTO \# |  |  |  |
|  | 65 | CLEAN FROM \# |  |  |  |
|  | 60 | WORK SEQUENCE |  |  |  |
|  | 50 | TENENT NOTIFIED? |  |  |  |
|  | 45 | TENENT WATER DRAINED Y |  |  |  |
|  | 40 | OPEN V=VAC R=ROD H=HAND |  |  |  |
|  | 35 | CAUSE = UNKNOWN Y |  |  |  |
|  | 30 | CAUSE $=$ OTHER? |  |  |  |
|  | 25 | CAUSE $=$ DEBRIS $Y$ |  |  |  |
|  | 20 | CAUSE $=$ ROOTS $Y$ |  |  |  |
|  | 15 | CAUSE $=$ GREASE $Y$ |  |  |  |
|  | 10 | CHECKED TO STRUGTURE\# |  |  |  |
|  | 75 | TV FROM \# |  |  |  |
| ID: | 1208129 | . Category: DOSD WORK DAT | Type: SSO-CSO | Tittle: S | SSO-SCO DATA |
|  | Seq. No | Attribute |  | Value |  |
|  | 75 | RECEIVING STRUCTURE \# |  | 0004c0526 |  |
|  | 70. | TIME/DATE OVERFLOW STOPPED |  | 05/29/2012 | 1355 |
|  | 65 | SECURE $1=$ SIGN $2=$ HANGER 3 $=$ OTHER |  |  |  |
|  | 60 | SUMP PUMP ADDRESS |  |  |  |
|  | 55 | OVERFLOW AFFECTED AREA? |  |  | , |
|  | 50 | CAUSE $=$ UNKNOWN - Y |  | $y$ |  |
|  | 45. | CAUSE $=$ OTHER? |  |  | - |
|  | 40 | CAUSE $=$ SURCHARGED $-\gamma$ |  |  |  |

Oracle

Service Request No.
1207171
*1207171*

Lreated Date: 05/29/2012 01:05 PM WORK LOCATION

Address: 380 GRANT AVE
Cross Street:
City:

Suite:
State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YUPFLOW - Flow from ground or structure.
Problem Description:

| Requested Date: | Crew: DAVM1 |
| :---: | :---: |
| Next Approver: | Dept: SEWERS |
| Dispatcher: DAVEY, MICHAEL | Call Back Ready: N |
| Status: CLOSED | Customer Call Back: N |
| WO/Task No: $1216468 / 01$ | Finished Date: 05/30/2012 07:12:04AM |

CUSTOMER INFORMATION

| stomer ID: |  | Bill Customer: N |
| ---: | ---: | ---: |
| Name: |  | Customer Call Back: N |
| Work Phone: |  | Ext: |
| Company: | $\therefore$ |  |

## REPORTED BY

| Name: davey, michael |  |  | Call Back: $N$ |
| :---: | :---: | :---: | :---: |
| Address: |  |  | Suite: |
| City: |  | State: | Zip: |
| Work Phone: $(614) 645-7102$ | Ext: |  | Home Phone: |

## CLOSEOUT INFORMATION



SPECIFICATIONS


Service Request No.

## WORK LOCATION



Problem Description: The caller (who wished to remain anonymous) stated that the resident at 1372 Lark Dr. Is allowing his trallor to drain sewage onto the ground and it is flowing through the (trailor) park. 2063 17th Ave. is the trailor park's address and the Lark Dr. address where the sewage is flowing from.

| Requested Date: | Crew: COBR1 | Dept: SEWERS |
| :--- | :---: | :---: | Area: 0056

## CUSTOMER INFORMATION

| - stomer ID: | Bill Customer: N |  |
| ---: | ---: | ---: |
| Name: | Ext: | Customer Call Back: N |
| Work Phone: |  | Home Phone: |
| Company: |  | Tax ID: |

REPORTED BY

| Name: |  | Call Back: N |
| ---: | :---: | :---: |
| Address: |  | Suite: |
| City: | Ext: | State: |
| Work Phone: |  |  |

Oracie
Report s_rpt138 v 17153-3

Service Request No.
1207121
*1207121*
Created Date; 05/26/2012 01:38 AM

## CLOSEOUT INFORMATION



## SPECIFICATIONS

| ID: | 1208121 | Category: DOSD WORK DA7 | Type: SPILL | Titte: SPILL DATA |
| :---: | :---: | :---: | :---: | :---: |
|  | Seq: No | Attribute |  | Value |
|  | 5 | SPILL AFFECTED AREA? |  | Harmon Ave and Greenlawn Ave |
|  | 10 | CAUSE? |  | Tanker spill while dropping fuel |
|  | 15 | CONTAINED $Y$ |  | $Y$ |
|  | 35 | RECEIVING WATERWAY? |  | Scloto S2 |
|  | 25 | EPA ON SITE Y |  | Y Wes Drake |
|  | 30 | RECEIVING STRUCTURE \# |  | 0019 T0207 and 0019T0379 |
|  | 20 | STORMWATER NOTIFIED Y |  | Y |

Service Request No.
1207121
*1207121*
Creáted Date: 05/26/2012 01:38 AM
WORK LOCATION

| Address: HARMON AVE | Suite: |
| :---: | :---: |
| Cross Street: GREENLAWNAVE | State: $\quad$ Zip: |
| City: |  |
| Problem Code: YSPILL - Non-water spill; chemical, fuel, etc. |  |

Problem Description: gass station $\mathbf{2 5}$ gall in drain

| Requested Date: : | Crew: COBR1 | Dept: SEWERS |
| :--- | :---: | :---: |$\quad$ Area: 0019

## CUSTOMER INFORMATION

| tomer ID: | Bill Customer: N |  |
| ---: | ---: | ---: |
| Name: | Ext: | Customer Call Back: N |
| Work Phone: |  | Home Phone: |
| Company: | Tax ID: |  |


| REPORTED BY |  | Call Back: N |
| :---: | :---: | :---: |
| Name: fire dept |  | Suite: |
| Address: HARMON AVE |  | Zip: |
| City: | Ext: | State: |
| Work Phone: |  |  |

## Oracle

Report s_fpt138 v 17153-3

Service Request No. 1206974

SPECIFICATIONS


Finish: 05/23/2012 11:00 AM
Completed: $Y$
Failure: YSTOP
Comments:
SSO3 \& Engineered sanitary overflow number 206 was found overflowing during routine inspection. The 8 inch sanitary sewer was stopped up at upstream manhole \# 0039s0275. The sewage entered the storm system from the engineered overflow in manhole number 0039s0293. Attempts to contain the sewage at manhole \# $0039 t 0276$ with saṇdbags were unsuccessful. Sewer was opened with a vactor and overflow ended at 10:53 am. Mike Foster was notified by Michael Davey. Signs and door hangers were not placed at the site because the sewage was confained in the storm system. Signage exists at the discharge location, structure number 0040t0076. The storm and sanitary sewers will be cleaned under service request number 1206974. Cause of overflow was construction debris from the road resurfacing. There was asphalt and a broken 2 inch riser in the manhole. The city's $10^{\prime \prime}$ sanitary sewer needs to be cleaned by a Vactor starting at manhole\# 0039s0293 located In Reeb Ave @ Bruck St cleaning south to manhole\# 0039s0284. The city's 78" storm sewer needs to be cleaned starting at manhole\# $0039 t 0276$ located in Reeb Ave @ Bruck St cleaning south as needed

Inspected By: M Davey J Pasmore
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C :

Date: 24 -MAY-12
Date: $\qquad$
Date: 04-JUN-12

SPECIFICATIONS

submitted by: DEPIESZALA

Oracla
Repart s_plisis v 17153-3

Service Request No. 1206974
*1206974*
vieated Date: 05/23/2012 10:07 AMM

## WORK LOCATION

Address: BRUCK ST
Cross Street: REEB AVE
City:

Suite:

State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YUPFLOW -Flow from ground or structure,
Problem Description:

Requested Date:
Crew: DAVM1 Dept: SEWERS
Area: 0039
Next Approver:
Dispatcher: WHITE, JANICE L
Status: CLOSED
WO/Task No: 1215945/01

Call Back Ready: N
Customer Call Back: N
Finished Date: 05/24/2012 10:37:59AM

## CUSTOMER INFORMATION

| nıstomer ID: |
| ---: |
| Name: |
| Work Phone: |
| Company: |

## REPORTED BY

| Name: DAVEY, MIKE |  | Call Back: N |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: |  | State: |
| Work Phone: $(614) 645-7102$ | Ext: |  |

## CLOSEOUT INFORMATION

| Start: 05/09/2012 04:15 PM |
| :--- | :--- |
| Failure: YNYD |
| Comments: Checked inlet \#0367t0617. Storm inlet was open it appears to have a been a discharge of somekind not |
| sewer related. Storm water was notifled of our findings. Tim Hedges arrived on the scene first. When we |
| arrived he told us the discharge was not the sanitary that it appeared to be a discharge in the storm line |
| that was not sewwage related. |

SPECIFICATIONS


Oracle
Report s_rpli38 v 17153-3

Service Request No. 1206346

WORK LOCATION

| Address: 5255 WOOD RUN BLVD | Suite: |  |
| :---: | :---: | :---: |
| Cross Street: |  |  |
| City: | State: Zip: |  |
|  | Service Request Type: INVESTIGATE |  |
| Problem Code: YSPILL - Non-water spill; chemical, fuel, etc. |  |  |

Problem Description: CITIZEN SAYS THEY SEE AND SMELL RAW SEWAGE RUNNING OUT OF A PIPE BEHIND THIS ADDRESS INTO SLATE RUN CREEK. MIKE DALTON FROM OHIO EPA. 614-728-3823 ALSO CALLED AND REPORTED THE SPILL, AT ADDRESS OF 5260 TIMBERLINE WOOD RUN AT SLATE RUN CREEK

| Requested Date: <br> Next Approver: ' | Crew: HOFW1 | Dept; SEWERS |
| :---: | :---: | :---: | Area: 0367

## CUSTOMER INFORMATION

| Customer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |

REPORTED BY

| Name: MILLER, BRUCE |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: |  | State: |
| Work Phone: (614) $538-1748$ | Ext: |  |
| Zip: |  |  |

Refer to Illicit Discharge Investigation 05/10/2012-1 Unknown

Oracle
Report s_pti38 v 17153-3

## CLOSEOUT INFORMATION



## SPECIFICATIONS

| ID: | 1207149 | Category: DOSD WORK DAT | Type: SPILL |  | SPILL DATA |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute | . | Value |  |
|  | 5 | SPILL AFFECTED AREA? |  |  |  |
|  | 10 | CAUSE? |  |  |  |
|  | 15 | CONTAINED Y |  |  |  |
|  | 35 | RECEIVING WATERWAY? |  |  |  |
|  | 25 | EPA ON SITE Y |  |  |  |
|  | 30 | RECEIVING STRUCTURE\# |  | . |  |
|  | 20 | STORMWATER NOTIFIED Y |  |  |  |

Service Request No.
1206019
*1206019*
Created Date: 05/03/2012 02:48 PM

Suite:
Address: 217 ALCOTT RDE
Cross Street:
City:
State: $\quad$ Zip:
Service Request Type: INVESTIGATE
Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.

## Problem Description: CALLER REPORT JUNK CAR PARKED IN F/O LEAKING OIL, PLEASE INVESTGATE THE STORM SEWERS

| Requested Date: | Crew: SMIC1 | Dept: SEWERS |
| :--- | :---: | :---: |
| Next Approver: |  | Area:0105 |
| Dispatcher: JONES, CRYSTALYN R | Call Back Ready: Y |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 05/03/2012 03:32:15PM |  |


| CUSTOMER INFORMATION | Bill Customer: N |
| :---: | :---: |
| tomer ID: | Customer Call Back: N |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |


| Name: SMITH, CORRINE |  |  | Call Back: Y |
| :---: | :---: | :---: | :---: |
| Address: 225 ALCOTT RD E |  |  | Suite: |
| City: 311 COMPLAINT |  | State: | Zip: |
| Work Phone: (614) 492-1349 | Ext: |  | Home Phone: |

Service Request No.
Created Date: 04/04/2012 10:51 AM
1204777
*1204777*

## CLOSEOUT INFORMATION



sated Date: 04/04/2012 10:51 AM
WORK LOCATION


Problem Description: CALLER (311) STATES THERE SEEMS TO BE SOME SORT OF OIL BEING DUMPED IN GUTTER IN FIO ADDRESS THE CONCERN THAT MAY BE GOING INTO SEWER SEEMS TO BE COMING FROM SUMP PUMP, PLEASE INVESTIGATE

| Requested Date: | Crew: ENGS1 | Dept: SEWERS |
| :--- | :---: | :---: |
| Next Approver: | Area: 0097 |  |
| Dispatcher: JONES, CRYSTALYN R | Call Back Ready: Y |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: 04/05/2012 08:12:29AM |  |

CUSTOMER INFORMATION

| rustomer ID: |  | Bill Customer: N |
| :---: | :---: | :---: |
| Name: | $\ddots$ | Customer Call Back: N |
| Work Phone: |  | Ext: |
| Company: |  | Home Phone: |

REPORTED BY.

| Name: HERZBERG, LOU/PATRICIA | Call Back; Y |
| :---: | :---: |
| Address: 2872 BERWICK BLVD | Suite: |
| City: |  |
| Work Phone: (614) 260-9663 | Ext: CELL |

Service Request No.
1204375
*1204375*

SPECIFICATIONS


Created Date: 03/26/2012 01:10 PM
Service Request No.
1204375

## *1204375*

CLOSEOUT INFORMATION


SPECIFICATIONS


Submitted by: DEPIESZALA Oracle
Report s_pt138 $\vee$ 17153-3

## WORK LOCATION

| Address: 3350 CHAMPION AVE | Suite: |
| :---: | :---: |
| Cross Street: STOCKBRIDGE RD | State: |
| City: | Sip: |
| Sroblem Code: YUPFLOW - Flow from ground or structure. |  |

Problem Description: CITIZEN SEES WATER COMMING OUT OF A STORM SEWER. FACING THE SCHOOL, THE SEWER IN ON THE LEFT SIDE.

| Requested Date: | Crew: ENGS1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area:0149 |
| Dispatcher: WHITE, JANICE L | Call Back Ready: $N$ |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: 1209679/01 | Finished Date: 03/28/2012 07:52:36AM |  |

## CUSTOMER INFORMATION

| Customer ID: | Bill Customer: N |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |

## REPORTED BY

| Name: PER 311 |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: | Ext: | State: |
| Work Phone: |  |  |

## Oracle

Report s_rpt138 v 17153-3

Service Request No.
1203769
*1203769*
Created Date: 03/16/2012 10:34 AM

Finish: 03/16/2012 11:15 AM
Completed: $\qquad$
Failure: YCONT
Repair: $\qquad$ - Further Action: YREQST

Comments: Chris Bonner of the OEPA wanted a Stormwater crew not a Complaint crew to help him with this issue. Notified the Dispatcher \& she called the Stormwater section.

Inspected By: verhage/yurkovich
Signoff By: $\qquad$
Closed By: RICHARDS, JEFFREY C

Date: $\qquad$
Date: $\qquad$
Date: 21-MAR-12

SPECIFICATIONS


Service Request No.
1203769
*1203769*
vieated Date: 03/16/2012 10:34 AM
WORK LOCATION

Address: 3600 INTERCHANGE RD
Cross Street: WILSON RD
City:

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: PER EPA A CITIZEN NOTIFIED THEM OF A POSSIBLE DIESEL FUEL IS BEING DISCHARGED INTO THE STORM THERE AND NOW CAN BE SEEN IN THEDRY RUN CREEK S/W/O THE GAS STATION. THE CITIZEN WHOM NOTIFED EPA IS RICHARD GROSS, 3368 BRICHAR WAY, 6142799753

| Requested Date: | Crew: VERS1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0117 |
| Dispatcher: WHITE, JANICE L |  |  |
| Status: CLOSED Back Ready: N |  |  |
| WO/Task No: | Customer Call Back: N |  |

CUSTOMER INFORMATION

| nistomer ID: | Bill Customer: N |
| :---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |

REPORTED BY

| Name: BONNER, CHRIS |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: |  | Sulte: |
| City: EPA | State: | Zip: |
| Work Phone: (614) $395-6936$ | Ext: |  |

Created Date: $02 / 27 / 201212: 36 \mathrm{PM} \quad$ Service Request No. $\quad 1202804 \quad * 120804^{*}$

CLOSEOUT INFORMATION

| Start: 02/27/2012 02:50 PM | Finish: 02/27/2012 03:05 PM |  | Completed: Y |
| :---: | :---: | :---: | :---: |
| Fallure: YOPEN | Repair: YNFWN | Further Action: |  |
| Comments: YWIBOPEN ${ }^{\text {C }}$ The 18 inch checked. Checked upstre contact a private sewer cle BECAUSE TENANT. WAS | anitary sewer ser manhole \# C04 ner by investigator UMPING SEWAG | cation <br> n man FOST DOWN |  |
| Inspected By: MBOYD/SENGLE |  | Date: |  |
| Signoff By: |  | Dat |  |
| Closed By: RICHARDS, JEFFREY C |  | Date: |  |

## SPECIFICATIONS

| ID: | 1203096 | : Category: DOSD WORK DA1 | Type: WIB-MSS | Title: WATER IN BASEMENT - MAIN SEW |
| :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute |  | Value |
|  | 5 | CHECKED FROM STRUCTURE \# |  |  |
|  | 80 | TVTO \# |  |  |
| , | 15 | CAUSE = GREASE $Y$ |  |  |
|  | 20 | CAUSE $=$ ROOTS $Y$ |  |  |
|  | 25 | CAUSE $=$ DEBRIS $Y$. |  |  |
|  | 30 | CAUSE $=$ OTHER? |  |  |
|  | 35 | CAUSE $=$ UNKNOWN Y |  |  |
|  | 40 | OPEN V=VAC $\mathrm{R}=$ ROD $\mathrm{H}=\mathrm{HAND}$ |  |  |
|  | 45 | TENENT WATER DRAINED Y |  |  |
|  | 50 | TENENT NOTIFIED? |  |  |
|  | 60 | WORK SEQUENCE |  |  |
|  | 65 | CLEAN FROM \# |  |  |
|  | 70 | CLEAN TO \# |  |  |
|  | 75 | TV FROM \# |  |  |
|  | 10 | CHECKED TO STRUCTURE \# |  |  |

## Oracle

Report s-ppt138 v 17153-3
.eated Date: 02/27/2012 12:36 PM
Service Request No.

WORK LOCATION

Address: 426 WHITTIER STE
Cross Street:
City:
1202804.
*1202804*

| Address: 426 WHITTIER STE | Suite: |
| :---: | :---: |
| Cross Street: | State: |
| City: | Service Request Type: INVESTIGATE |
| Problem Code: YUPFLOW - Flow from ground or structure. |  |

Problem Description: CALLER REPORTS THAT SEWAGE IS COMING UP OUT OF GROUND IN BACKYARD OF ABOVE ADDRESS, AND IS RUNNING DOWN THE ALLEY.

| Requested Date: | Crew: BOYM1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: | Area: 0005 |  |
| Dispatcher: BOBO, DAVID L | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: $N$ |  |
| WO/Task No: | Finished Date: 02/27/2012 08:39:57PM |  |

CUSTOMER INFORMATION

| Customer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Customer Call Back: N |

REPORTED BY

Name: SPENCER, RAY
Address:
City:
Work Phone: (614) 443-6158
Ext:

Call Back: N
Suite:
Zip:
Home Phone:
aated Date: 02/21/2012 04:50 PM

Service Request No.
1202509
*1202509*

SPECIFICATIONS


1202509

## *1202509*

## CLOSEOUT INFORMATION

| Start: 02/21/2012 05:15 PM |
| :--- |
| Failure: YMHOP | | Finish: 02/21/2012 05:45 PM |
| :--- |
| Comments: YSSO2 - The 8 inch sanitary sewer was stopped up when checked. Stoppage occurred between upstream |
| manhole\# S0216 and downstream manhole \# S0222. Manhole \#S0221 was found overflowing at time of |
| arrival. The sewage entered the storm system at MH\# number.RP3487 HABITAT II PLAN PROFILE. |
| PRIVATE STORM SEWER PER 910 PERMITS.. Attempts to contain the sewage were successful. MOST |
| CONTAIN TO GROUNDI. Sewer was opened with vactor and overflow ended at 2000HRS. Mike Foster |
| was notified by DISPATCHERAT 1725 HRS. Signs and BARRICADES were placed at UP-FLOW and the |
| site was secured from the public. The site clean up and storm and sanitary sewer cleaning will be done |
| under service request number \#1202509. Cause of overflow was roots/grease. |

## SPECIFICATIONS



## WORK LOCATION

Address: 3771 HABITAT DR Cross Street:

City:

Suite:

State: $\quad Z i p:$
Service Request Type: INVESTIGATE

Problem Code: YUPFLOW - Flow from ground or structure.

## Problem Description: WILSON COURT APARTMENTS AT THE CORNER OF WILSON AND ROBERT RD. BEHIND ADDRESS IS A MH OVERFFLOWING. ALSO THEY FOUND SEVERAL MH IN PARKING LOT CLOGGED

| Requested Date: | Crew: BOYM1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0167 |
| Dispatcher: WHITE, JANICE L |  |  |
| Status: CLOSED |  | Call Back Ready:N |
| WO/Task No: 1205089/01 | Customer Call Back:N |  |

CUSTOMER INFORMATION

| ~istomer ID: | Bill Customer: N |
| ---: | :---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Home Phone: |

REPORTED BY

| Name: DELANEY, JOHN |  | Call Back: $N$ |
| :---: | :---: | :---: |
| Address: 3850 HABITAT DR |  | Sulte: |
| City: RENAL OFFICE |  | State: |
| Work Phone: $(740) 274-2376$ | Ext: |  |

## Created Date: 01/27/2012 01:52 PM

Service Request No.
1201380 $\quad * 1201380 *$
CLOSEOUT INFORMATION


## SPECIFICATIONS

| ID: | 1200835 | ' Category: DOSD WORK DA' | Type: WIB-MSS | Title | WATER IN BASEMENT - MAIN SEW |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribute |  | Value |  |
|  | 5 | CHECKED FROM STRUCTURE \# |  |  |  |
|  | 80 | TV TO\# |  |  |  |
|  | 15 | CAUSE $=$ GREASE $Y$ |  |  |  |
|  | 20 | CAUSE = ROOTS Y |  |  |  |
|  | 25 | CAUSE $=$ DEBRIS $Y$ |  |  |  |
| - | 30 | CAUSE $=$ OTHER? |  |  |  |
|  | 35 | CAUSE = UNKNOWN Y |  |  |  |
|  | 40 | OPEN V=VAC R=ROD H=HAND |  |  |  |
|  | 45 | TENENT WATER DRAINED Y |  |  |  |
| . | 50 | TENENT NOTIFIED? |  |  |  |
| . | 60 | WORK SEQUENCE |  |  |  |
| , | 65 | CLEAN FROM \# |  |  |  |
|  | 70 | CLEAN TO \# |  |  |  |
|  | 75 | TV FROM \# |  |  |  |
|  | 10 | CHECKED TO STRUCTURE \# |  |  |  |

Service Request No.
1201380
*1201380*

## WORK LOCATION

Address: 5TH AVE E
Gross Street: SAINT CLAIR AVE
City:

Suite:

State: Zip:
Service Request Type: INVESTIGATE

Problem Code: YUPFLOW - Flow from ground or structure.
Problem Description: RAW SEWAGE ON THE GROUND NEAR THE RAILROAD TRESTLE ALONG E. FIFTH AVE. CITIZEN SAYS THE SEWAGE IS ALWAYS IN THE DITCH. CITIZEN SAYS SHE CAN SHOW THE EXACT LOCATION OF THE SEWAGE. CITIZEN WOULD LIKE A CALL OF THE RESULTS.

| Requested Date: | Crew: DAVM1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0030 |
| Dispatcher: WHITE, JANICE L | Call Back Ready: N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: | Finished Date: $01 / 30 / 2012$ 10:41:54AM |  |

## CUSTOMER INFORMATION

| Nstomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Customer Call Back: N |
| Work Phone: | Home Phone: |
| Company: | Tax ID: |

REPORTED BY

| REPORTED BY |  | CIGHT, CARRIE |
| :---: | :---: | :---: |
|  |  | Call Back: N |
| Address: 641 E. FIFTH AVE |  | Suite: |
| City: | State: | Zip: |
| Work Phone: (614) 297-8290 | Ext: |  |

## SPECIFICATIONS



1201373
*1201373*
CLOSEOUT INFORMATION


## SPECIFICATIONS

| ${ }^{\text {ID: }}$ | 1200831 <br> Seq. No <br> 80 <br> 5 <br> 70 <br> 65 <br> 60 <br> 50 <br> 45 <br> 40 <br> 35 <br> 30 <br> 25 <br> 20 <br> 15 <br> 10 <br> 75 | - Category: DOSD WORK DA1 <br> Attribute <br> TV TO \# <br> CHECKED FROM STRUCTURE \# <br> CLEAN TO \# <br> CLEAN FROM \# <br> WORK SEQUENCE <br> TENENT NOTIFIED? <br> TENENT WATER DRAINED $Y$ <br> OPEN $V=V A C R=R O D \quad H=H A N D$ <br> CAUSE = UNKNOWN Y <br> CAUSE = OTHER? <br> CAUSE $=$ DEBRIS $Y$ <br> CAUSE $=$ ROOTS $Y$ <br> CAUSE = GREASE $Y$ <br> CHECKED TO STRUCTURE \# <br> TV FROM \# | Type: WIB-MSS | Tille: WATER IN BASEMENT - MAIN SEW Value |
| :---: | :---: | :---: | :---: | :---: |
| ID: | 1200847 <br> Seq. No <br> 75 <br> 70 <br> 65 <br> 60 <br> 55 <br> 50 <br> 45 <br> 40 | Category: DOSD WORK DAT Attribute RECEIVING STRUCTURE \# TIME/DATE OVERFLOW STOPPED SECURE $1=$ SIGN $2=H A N G E R ~ 3=O T H E R ~$ SUMP PUMP ADDRESS OVERFLOW AFFECTED AREA? CAUSE $=$ UNKNOWN $-Y$ CAUSE $=$ OTHER? CAUSE $=$ SURCHARGED $-Y$ | Type: SSO-CSO | Title: SSO-SCO DATA <br> Value <br> T0121 <br> $01 / 27 / 123$ 3PM <br> barrels/tape <br> street/Storm sewer <br> y |

- Submilied by: DEPIESZALA

Oracle

Service Request No.
. . ated Date: 01/27/2012 12:45 PM
1201373
*1201373*
WORK LOCATION

| Address: 4385 OLENTANGY RIVERRD | Suite: |  |
| :---: | :---: | :---: |
| Cross Street: | State: $\quad$ Zip: |  |
| City; | Service Request Type: INVESTIGATE |  |
| Problem Code: YUPFLOW - Flow from ground or structure. |  |  |

Problem Description: sewage has come up through manhole and is in parking lot, also manhole is caving in Manhole 0232 S0104 had overflowed during the day but had stopped by 3PM. Sewage left the manhole and entered storm inlet T0121. Barrels and tape were placed around the contaminated area. Some blacktop around S0104 had been washed out and will need to be removed and replaced. Site needs to be cleaned up by a vactor.

| Requested Date: | Crew: HEDT1 | Dept: SEWERS |
| :--- | :---: | :---: |
| Next Approver: |  | Area: 0232 |
| Dispatcher: BOBO, DAVID L | Call Back Ready:N |  |
| Status: CLOSED | Customer Call Back: N |  |
| WO/Task No: 1202581/01 | Finished Date: 01/27/2012 07:34:50PM |  |

## CUSTOMER INFORMATION

| Cristomer ID: | Bill Customer: N |
| ---: | ---: |
| Name: | Ext: |
| Work Phone: |  |
| Company: | Customer Call Back: N |

## REPORTED BY

| Name: mattle, susanne |  |  | Call Back: N |
| :---: | :---: | :---: | :---: |
| Address: |  | Suite: |  |
| City: |  | State: | Zip: |
| Work Phone: $(614) 451-8485$ | Ext: |  | Home Phone: |

## Service Request No.

Created Date: 01/06/2012 07:50 PM

## CLOSEOUT INFORMATION



## SPECIFICATIONS

| ID: | 1200228 | Category: DOSD WORK DAT | Type: SPILL |  | SPILL DATA |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Seq. No | Attribule |  | Value |  |
|  | 5 | SPILL AFFECTED AREA? |  |  |  |
|  | 10 | CAUSE? |  |  |  |
|  | 15 | CONTAINEDY |  |  |  |
|  | 35 | RECEIVING WATERWAY? |  |  |  |
|  | 25 | EPA ON SITE Y |  |  |  |
|  | 30 | RECEIVING STRUCTURE \# |  |  |  |
|  | 20 | STORMWATER NOTIFIED Y |  |  |  |

Service Request No.
sateḍ Date: 01/06/2012 07:50 PM

## WORK LOCATION

Address: 2500 FARMERS DR
Cross Street:
City:

Suite:

State:
Service Request Type: INVESTIGATE

Problem Code: YSPILL - Non-water spill; chemical, fuel, etc.
Problem Description: fire dept called about fuel spill in front of above address.

| Requested Date: | Crew: HARH1 | Dept: SEWERS |
| :---: | :---: | :---: |
| Next Approver: |  | Area: 0739 |
| Dispatcher; BOBO, DAVIDL |  |  |
| Status: CLOSED | Call Back Ready:N |  |
| WO/Task No: | Customer Call Back: N |  |

## CUSTOMER INFORMATION

| Customer ID: | Bill Customer: N |  |
| ---: | :---: | :---: |
| Name: | Ext: | Customer Call Back: N |
| Work Phone: |  | Home Phone: |
| Company: |  | Tax ID: |

## REPORTED BY

| Name: fire dept |  | Call Back: N |
| :---: | :---: | :---: |
| Address: |  | Suite: |
| City: | State: | Zip: |
| Work Phone: $(614) 221-1899$ | Ext: |  |

## City of Columbus <br> 2012 Construction Section, SWP3 Plans Review List

| \# | Name of Project | Plan Number | Acres Disturbed |
| :---: | :---: | :---: | :---: |
| 1 | Hap Cremean Lagoon 3 | Grade \& Fill | 148 |
| 2 | South High St. (Scioto Downs) | 2946-E | 63 |
| 3 | Cypress Wesleyan Church | CC-16317 | 58.4 |
| 4 | Abbie Trails - Mass Fill | CC-16268 | 29.5 |
| 5 | Old State Rd - Del. Co | 2952-E | 29.15 |
| 6 | Hilliard Woods Ph 1 \& 2 | 3008-E | 21 |
| 7 | Lakes @, Taylor Station, Sec 6, 1 \& 2 | CC-16337 | 16.3 |
| 8 | Wal-Mart on Sawmill | CC-16338 | 15.73 |
| 9 | Riverside MH Neuroscience Inst. | CC-16333 | 14.4 |
| 10 | Scioto Audobon Southern Tier | CC-16269 | 14.2 |
| 11 | National Lime \& Stone | CC-16117 | 14 |
| 12 | Giant Eagle on 3rd Ave. | CC-16150 | 14 |
| 13 | Hayden Crossing Sect 8 | CC-16195 | 13.1 |
| 14 | V \& S Galvaizing Plant | CC-16146 | 12.7 |
| 15 | Smoky Row Rd SWI | 2955-E | 12.3 |
| 16 | The Strathmoor | CC-16242 | 12 |
| 17 | Palmer House on the Boulevard | CC-16302 | 12 |
| 18 | Clifton on the Boulevard | CC-16303 | 12 |
| 19 | Upper Albany West Sect. 7 | 2993-E | 11.5 |
| 20 | The District (Edwards Farm) | CC-16325 | 10.3 |
| 21 | Shook Rd. (SR 317) Phase 2 | 2873-E | 10 |
| 22 | Abbie Cove Apts | CC-16274 | 10 |
| 23 | Dublin Rd Water Plant | CC-16258 | 10 |
| 24 | Cabela's @ Polaris | CC-16133 | 9.5 |
| 25 | Lakes @ Taylor Station, Sec 5 | CC-16114 | 9.4 |
| 26 | Park Place Hotel | CC-16279 | 9.2 |
| 27 | Northpark Phase 2 \& 3 | CC-16321 | 9 |
| 28 | Germain Infiniti | CC-16255 | 8.2 |
| 29 | Winchester Village Apts | CC16326 | 8.2 |
| 30 | VLD Grading | CC-16121 | 7.5 |
| 31 | American Addition Ph1 | 2639-E | 7.4 |
| 32 | OSU Field Imps | CC-16125 | 7 |
| 33 | Village at Preserve X-ing PH4, Pt2 | CC-16192 | 6.6 |
| 34 | Concourse Hotel | CC-16318 | 6.5 |
| 35 | POLARIS 801 | CC-16295 | 6.4 |
| 36 | Villages at Albany Crossing, Sect. 8 | CC-16130 | 6.2 |
| 37 | Alum Creek Dr. Fill Site | Grade \& Fill | 6.1 |
| 38 | Walmart Parking Lot Demo | CC-16205 | 6 |
| 39 | Hamilton Rd Senior Housing | CC-16243 | 6 |
| 40 | Germain Infiniti | Mass Exc. | 5.2 |
| 41 | Randall Hall (2265 Refugee) | CC-16248 | 5 |
| 42 | Refugee Road (2265) | Grade \& Fill | 4.9 |
| 43 | Blacklick Ck. Stream Restoration | CC-16245 | 4.7 |
| 44 | Village @ Haydens Crossing Sect. 9 | CC-16237 | 4.5 |

City of Columbus
2012 Construction Section, SWP3 Plans Review List

| \# | Name of Project | Plan Number | Acres Disturbed |
| :---: | :---: | :---: | :---: |
| 45 | Chelsea Sq. West | CC-16230 | 4.4 |
| 46 | Riverside Mass Exc. | CC-16149 | 4 |
| 47 | Cota Facility Renovations | CC-16209 | 4 |
| 48 | Central College BW Sub. Pt 1 | CC-16264 | 4 |
| 49 | Germain Ford on Sawmill | CC-16210 | 3.8 |
| 50 | Dublin Granville Dev. | CC-16223 | 3.8 |
| 51 | Henderson Road Development | CC-16143 | 3.3 |
| 52 | Trabue Dublin Rds | Grade \& Fill | 3.3 |
| 53 | Hap Cremean Water Plant Imps | CC-16261 | 3.2 |
| 54 | Turkey Hill on Georgesville | CC-16301 | 3.2 |
| 55 | Residence Inn by Marriot | CC-16316 | 3 |
| 56 | Winchester/Gender Development | CC-16176 | 2.7 |
| 57 | Olentangy Meadows South | 4443-D | 2.7 |
| 58 | Madden's Point Hotel | CC-16328 | 2.5 |
| 59 | Brittany Hills Bike Path | ? | 2.4 |
| 60 | Columbus Commons Mixed Use | CC-16238 | 2.4 |
| 61 | Alum Creek Storm Mitigation | CC-16200 | 2.3 |
| 62 | Columbia Gas - Arena Dist. | Grade \& Fill | 2.3 |
| 63 | Brodbelt Arena West | 2690-E | 2.2 |
| 64 | University Marriot Hotel | CC-16171 | 2.2 |
| 65 | Cardinal Self Storage | CC-16119 | 2 |
| 66 | Wat Buddha Samakidham | CC-16155 | 2 |
| 67 | Southside Health Center | CC-16187 | 2 |
| 68 | Lyra North Stream Mitigation | CC-16282 | 2 |
| 69 | Knightsbridge Medical Office | CC-16283 | 2 |
| 70 | Jim Keim Ford | CC-16290 | 2 |
| 71 | Riverside Methodist Interim | CC-16120 | 1.7 |
| 72 | OSU - 18th Ave. | CC-16167 | 1.7 |
| 73 | Long St. Apts Ph 1\&2 | CC-16207 | 1.6 |
| 74 | Freeway Business Park | CC-16276 | 1.6 |
| 75 | Long St/Apts SWI | 2984-E | 1.6 |
| 76 | Building 10K, LLC | CC-16287 | 1.6 |
| 77 | Columbia Gas Offices | CC-16315 | 1.6 |
| 78 | BIR, Chilled Water SU | CC-16144 | 1.5 |
| 79 | Milo - Grogan Recreation Center | CC-16165 | 1.5 |
| 80 | Pet Suites on Hamilton | CC-16250 | 1.5 |
| 81 | Linden Neighborhood CIP | CC-16178 | 1.4 |
| 82 | Olive Garden on Renner | CC-16191 | 1.4 |
| 83 | McDonalds on Morse | CC-16298 | 1.4 |
| 84 | Nationwide Childrens Hospital | CC-16164 | 1.3 |
| 85 | McDonalds Rebuild (W. Broad) | CC-16221 | 1.3 |
| 86 | Grahm Electric | CC-16122 | 1.2 |
| 87 | OSU Chilled Water Plant Storm | CC-16159 | 1.2 |
| 88 | Fireproof Building on N. High | CC-16241 | 1.2 |

City of Columbus
2012 Construction Section, SWP3 Plans Review List

| $\#$ | Name of Project | Plan Number | Acres Disturbed |
| :---: | :--- | :---: | :---: |
| 89 | Kroger on Chambers Exp | CC-16284 | 1.2 |
| 90 | Abbie Trails Drive | $2992-\mathrm{E}$ | 1.2 |
| 91 | Cornerstone Academy Addition | CC-16128 | 1.1 |
| 92 | Flat II | CC-16285 | 1.1 |
| 93 | Polaris Parkway (2045) | CC-16332 | 1.1 |
| 94 | Ashbuton/Dale CIP | Water | $1+$ |
| 95 | Graceland Shopping | $2945-\mathrm{E}$ | $1+$ |
| 96 | Neil Ave. Signal Upgrades | $2964-\mathrm{E}$ | $1+$ |
| 97 | American Addition Demo. | FRA-376 | $1+$ |
| 98 | Winchester Pike @ Brice | $3005-\mathrm{E}$ | $1+$ |
| 99 | Stelzer/James Road | $2926-\mathrm{E}$ | $1+$ |
| 100 | Eakin Rd over Early Run | $2943-\mathrm{E}$ | 1 |
| 101 | Marland Dr. Bridge Rep. | CC-16126 | 1 |
| 102 | Wall St. Sewer Relocation (San) | CC-16134 | 1 |
| 103 | Arena West-Private Drive | $2944-\mathrm{E}$ | 1 |
| 104 | W. Nationwide Blvd. SI | $2947-\mathrm{E}$ | 1 |
| 105 | Spring, Lafayette, Neilston SWI | $2950-\mathrm{E}$ | 1 |
| 106 | N. High St. \& Westview (COTA) | CC-16157 | 1 |
| 107 | N. High St. Layover (COTA) | $2949-\mathrm{E}$ | 1 |
| 108 | OSU Chilled Water Plant | $2951-\mathrm{E}$ | 1 |
| 109 | Linowrth Rd. Imps @ Bluffway | $2941-\mathrm{E}$ | 1 |
| 110 | Bikeway (Misc. Intersections) | CC-16162 | 1 |
| 111 | Cardinal Self Storage | CC-16160 | 1 |
| 112 | Millay Alley | CC-16170 | 1 |
| 113 | Tire Discounters - Stelzer | $1574-\mathrm{E}$ | 1 |
| 114 | High St. FRA 23-23.69 | $2958-\mathrm{E}$ | 1 |
| 115 | Parsons Ave. SI | $2961-\mathrm{E}$ | 1 |
| 116 | Morse Road @ Village at Preserve X-ing | Grade \& Fill | 1 |
| 117 | ISP Chemicals - Atlas Ave. | $2962-\mathrm{E}$ | 1 |
| 118 | Starr Ave - Alley N/O | CC-16172 | 1 |
| 119 | Third Ave. @ Olentangy RR (San) | $2963-\mathrm{E}$ | 1 |
| 120 | Fisher Rd. Driveway | $2959-\mathrm{E}$ | 1 |
| 121 | Noe Bixby @ E. Main St. Culvert | $2960-\mathrm{E}$ | 1 |
| 122 | Fisher Rd @ Hague Ave. SI | $2965-\mathrm{E}$ | 1 |
| 123 | Clivedon Rd. \& Northgates SI | CC-16204 | 1 |
| 124 | Bobby Layman Chevrolet | $2967-\mathrm{E}$ | 1 |
| 125 | Dublin-Granville Rd. @, Federated | $2970-\mathrm{E}$ | 1 |
| 126 | N. Wright Ave. Utility Xing | $2973-\mathrm{E}$ | 1 |
| 127 | Morse \& Sunbury Rd's (RLC) | $2974-\mathrm{E}$ | 1 |
| 128 | S. High \& E. Rich St. Imps | $2975-\mathrm{E}$ | 1 |
| 129 | Thompson Rd @ Chestnut Hill Dr. | 1 |  |
| 130 | North Front St @ Hickory (SI) | $2977-\mathrm{E}$ | 1 |
| 131 | Primary Care Doctor's Office (SI) | 1 |  |
| 132 | Alum Creek Dr. E/on Refugee | 1 |  |
|  |  |  | 1 |

City of Columbus
2012 Construction Section, SWP3 Plans Review List

| $\#$ | Name of Project | Plan Number | Acres Disturbed |
| :---: | :--- | :---: | :---: |
| 133 | N. High @ E 5th Ave. SWI | $2983-\mathrm{E}$ | 1 |
| 134 | E. Main St. @, McCalister SI | $2987-\mathrm{E}$ | 1 |
| 135 | Fisher @ Hillard-Rome SI | $2985-\mathrm{E}$ | 1 |
| 136 | Morse @ Westerville Rd SI | $2980-\mathrm{E}$ | 1 |
| 137 | Tim Hortons, Harrisburge Pike SI | CC-162-E | 1 |
| 138 | Central College BW Sub. Pt 2 | CC-16294 | 1 |
| 139 | Family Dollar on S. Hamilton | $2991-\mathrm{E}$ | 1 |
| 140 | S. Hamilton Rd. SI | $2989-\mathrm{E}$ | 1 |
| 141 | Georgesville @ Clime SI | $2990-\mathrm{E}$ | 1 |
| 142 | Northland Mall NS SWI | CC-16297 | 1 |
| 143 | Town \& 4th St's CSO Imps | CC-16296 | 1 |
| 144 | Cherry \& 4th Sts Redirection | $3000-\mathrm{E}$ | 1 |
| 145 | Thompson Rd SI | $2986-\mathrm{E}$ | 1 |
| 146 | Northwest Blvd SI | $2994-\mathrm{E}$ | 1 |
| 147 | Goodale/Olentangy Trail | $2997-\mathrm{E}$ | 1 |
| 148 | US 33@ Twin Rivers Drive | $3006-\mathrm{E}$ | 1 |
| 149 | N. High @ Russell (Cota) | CC-16066 | 1 |
| 150 | Terrace Av CIP611009 | $3003-\mathrm{E}$ | 1 |
| 151 | Gemini Place @ Carylake Circle | SWI 3007-E | 1 |
| 152 | Sawmill, Sawbury \& Billingsley | CC-16253 | 1 |
| 153 | Masters Insurance Group | CC-16185 | 1 |
| 154 | McCulloughs Tree Service on 161 | CC-16118 | 0.98 |
| 155 | Duxberry Landing Homes | CC-16131 | 0.97 |
| 156 | NTB Columbus E. Broad | CC-16132 | 0.9 |
| 157 | Fifth Third Bank N. High St. | 0.9 |  |
| 158 | Tire Discounters - 2640 Bethel Rd. | CC-16182 | 0.9 |
| 159 | Raising Canes - 6511 E. Broad | CC-16183 | 0.9 |
| 160 | Victorian Village Apts (W 3rd.) | CC-16196 | 0.9 |
| 161 | Automax P.L. on Billingsley | CC-16201 | 0.9 |
| 162 | Nationwide CH Entry Reconst. | CC-16202 | 0.9 |
| 163 | Dollar General on E. Main | CC-16214 | 0.9 |
| 164 | Family Dollar Store on Winchester Pike | CC-16226 | 0.9 |
| 165 | Byers Mazda Subaru | CC-16236 | 0.9 |
| 166 | Commons @ Livingston 2 | CC-1632 | 0.9 |
| 167 | McDonalds @ Community Park Dr. | 0.9 |  |
| 168 | McDonalds on S. High St. | CC-16344 | 0.85 |
| 169 | Taco Bell on Tussing Rd. | CC-1616198 | 0.8 |
| 170 | Columbus Diesel Truck Maint. | 0.8 |  |
| 171 | The Hubbard @ N. High \& Hubbard Ave. | CC-16224 | 0.8 |
| 172 | Chesapeake Park Apts. | 0.75 |  |
| 173 | Bobby Layman on W. Broad | CC-16225 | 0.8 |
| 174 | Indian Mound Park on Parsons | 0.8 |  |
| 175 | East Broad St. (6400) Office Redev. | 0.8 |  |
| 176 | North Meadows Retail Store | CC-15252 | 16311 |

City of Columbus
2012 Construction Section, SWP3 Plans Review List

| $\#$ | Name of Project | Plan Number | Acres Disturbed |
| :---: | :--- | :---: | :---: |
| 177 | Panda Express - Hillard Rome | CC-16154 | 0.73 |
| 178 | Discovery Commons on Spring | CC-16139 | 0.7 |
| 179 | Tim Hortons on Roberts Rd. | CC-16184 | 0.7 |
| 180 | Certified Oil, Frank Rd. | CC-16189 | 0.7 |
| 181 | East Broad St. (940-950) P.L. | CC-16193 | 0.7 |
| 182 | Hilltop Branch YMCA | CC-16206 | 0.7 |
| 183 | AY Manufacturing on Crosswinds | CC-16220 | 0.7 |
| 184 | Out of the Closet Thriftstore | CC-16259 | 0.63 |
| 185 | KFC @ Childrens Hospital | CC-16249 | 0.6 |
| 186 | Old Police Academy on McKinley | CC-16313 | 0.6 |
| 187 | Jewish Community Center on College | CC-16330 | 0.6 |
| 188 | Heidelberg Dist. Parking Addition | CC-16229 | 0.55 |
| 189 | Tim Hortons on N. Wilson Rd. | CC-16257 | 0.54 |
| 190 | Vision Service Plan on Rohr | CC-16208 | 0.5 |
| 191 | Bethel United Presby. Church | CC-16215 | 0.5 |
| 192 | Primary Care Dr's Office on Cleveland | CC-16219 | 0.5 |
| 193 | Alliance Data (Covered Walkway) | CC-16222 | 0.5 |
| 194 | Blackburn Park on Carpenter | CC-16310 | 0.5 |
| 195 | Columbus Midwest Sunoco | CC-16331 | 0.5 |
| 196 | Hayward Distributing on Perimeter | CC-16233 | 0.45 |
| 197 | Taco Bell on W. 5th Ave. | CC-16127 | 0.4 |
| 198 | Cleary Company on Kenny Rd. | CC-16138 | 0.4 |
| 199 | Omni Columbus One | CC-16163 | 0.4 |
| 200 | Tuttle Jupiter Expansion | CC-16197 | 0.4 |
| 201 | Tim Hortons on Harrisburg Pike | CC-16270 | 0.4 |
| 202 | Allied Mineral on Scioto Parkway | CC-16320 | 0.4 |
| 203 | Parker Store Pl on Wilson Rd. | CC-16329 | 0.4 |
| 204 | Moo Moo Express on W. 5th Ave. | CC-16145 | 0.3 |
| 205 | Norwich Ave. (38 East) P.L. | CC-16166 | 0.3 |
| 206 | Nationwide Blvd | CC-16323 | 0.3 |
| 207 | A\&G Auto LLC. Livingston | CC-16111 | 0.2 |
| 208 | Delwanda Park \& Ride (COTA) | CC-16124 | 0.2 |
| 209 | Wonderbread Apts on N. 4th | CC-16211 | 0.2 |
| 210 | 19 Hh Hole Restaurant E. 13th Ave. | CC-16267 | 0.2 |
| 211 | Days Inn New Additions | CC-16217 | 0.1 |
| 212 | Columbus Maennerchor |  | 0.1 |
| $\mathbf{2 1 2}$ | Plans Reviewed | Acres Disturbed | 903.18 |
|  |  |  |  |
|  | Potential) | 0 |  |

## 2012 SWP3 Construction Site Inspections

Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| Project Name |  |  |
| :---: | :--- | :---: | :---: | :---: |

Legend for Watersheds: AC - Alum Creek, BD - Big Darby, BL - Blacklick Creek, BW - Big Walnut Creek, LW - Little Walnut Creek, OL - Olentangy River, RF - Rocky Fork Creek, SC - Scioto River

## Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 48 | Germain Infinity | AC | Mass Exc. | 5 |
| 49 | Getsemani Church | AC | CC-15887 | 15 |
| 50 | Goo-Goo Car Wash | AC | CC-15967 | 10 |
| 51 | Gramercy Garage Stock Pile | AC | CC-16084 | 20 |
| 52 | Greater Christ Temple | AC | CC-15166 | 3 |
| 53 | Harrisburg Pike Clearing | AC | Complaint | 1 |
| 54 | Hobby Lobby Polaris | AC | Complaint | 4 |
| 55 | Hudson \& Joyce Storm Sewer | AC | 2630-E | 13 |
| 56 | Iglesia Fuente de Salvacion | AC | CC-15170 | 2 |
| 57 | Jack Gibbs Blvd. | AC | Complaint | 1 |
| 58 | Johnstown Rd and Stelzer Rd Imp | AC | 2908-E | 1 |
| 59 | JPMorgan Chase Parking Lot | AC | CC-15857 | 6 |
| 60 | Kenlawn St \& Eddystone Ave. | AC | Complaint | 1 |
| 61 | Lazelle Rd SI | AC | 2836-E | 5 |
| 62 | Linden Ave CIP 704 | AC | CC-14557 | 1 |
| 63 | Linden Mckinley Stem Academy | AC | CC-15730 | 15 |
| 64 | Linden Mckinley SWI | AC | 2784-E | 15 |
| 65 | Little Ceasars on Cleveland | AC | CC-16039 | 1 |
| 66 | Micro Hand Surgery | AC | CC-15892 | 9 |
| 67 | Morse Rd. \& Westerville Rd. Imp. | AC | 2980-E | 2 |
| 68 | Mufflin Elem. School | AC | CC-14669 | 1 |
| 69 | NCH - KFC Site Development Project | AC | CC-16249 | 2 |
| 70 | North Linden Health Center | AC | CC-15371 | 20 |
| 71 | Ohio Soils Recycling- S. Expansion Proj. | AC | Site Comp | 15 |
| 72 | Park (Wolfe) | AC | Complaint | 1 |
| 73 | Payne Av Warehouse | AC | CC-16103 | 2 |
| 74 | Polaris Amphitheater | AC | Complaint | 7 |
| 75 | Polaris Pkwy (North) | AC | 2880-E | 7 |
| 76 | Polaris West | AC | CC-14467 | 7 |
| 77 | Primary Care Dr's Office | AC | CC-16219 | 2 |
| 78 | Progressive Insurance Morse Rd. | AC | CC-15942 | 19 |
| 79 | Ramseyer Presbyterian Church | AC | CC-15821 | 15 |
| 80 | Shops at Northland Park | AC | CC-15965 | 18 |
| 81 | Spangler Road Condos | AC | CC-14204 | 2 |
| 82 | Spartan Logistics | AC | CC-16100 | 1 |
| 83 | Spring Hill Missionary Baptist Church | AC | CC-13647 | 2 |
| 84 | St Charles W Campus | AC | CC-16108 | 8 |
| 85 | Sunbury Hotel | AC | CC-16016 | 21 |
| 86 | Taco Bell-2111 E Livingston Av | AC | CC-16058 | 4 |
| 87 | Taylor Mansion -1400 E Broad St | AC | CC-16193 | 1 |
| 88 | The Lake at Polaris | AC | CC-15115 | 6 |
| 89 | Tim Hortons (Morse Rd.) | AC | CC-16019 | 12 |
| 90 | Tim Horton's/ Demo Lot - E Livingston Av | AC | CC-16059 | 2 |
| 91 | Traditions at Worthington Woods | AC | CC-14579 | 8 |
| 92 | Turkey Run Detention at Port Columbus | AC | Complaint | 1 |
| 93 | Village @ Courtright Sq. | AC | CC-13438 | 6 |
| 94 | Village at Bexley | AC | CC-12155 | 8 |

Legend for Watersheds: AC - Alum Creek, BD - Big Darby, BL - Blacklick Creek, BW - Big Walnut Creek, LW - Little Walnut Creek, OL - Olentangy River, RF - Rocky Fork Creek, SC - Scioto River

## 2012 SWP3 Construction Site Inspections

## Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 95 | Village at Polaris Green | AC | CC-13699 | 9 |
| 96 | Villages @ Alum Creek SEC. 1 | AC | 4430-D | 8 |
| 97 | Villages@ Alum Creek SEC. 2 | AC | 4448-D | 8 |
| 98 | Villas at Stone Cliff Sec 1 | AC | 2051-E | 22 |
| 99 | Villas at Stone Cliff Sec 1, P. 1 \& 2 | AC | CC-13890 | 18 |
| 100 | Villas at Stone Cliff Sec. 2, Pt. 1-3 | AC | CC-14240 | 22 |
| 101 | Wal-mart Parking Lot Demo | AC | CC-16205 | 9 |
| 102 | Wat Buddha Samakidham | AC | CC-16155 | 2 |
| 103 | Water Tower (Lazelle Rd.) | AC | CC-15595 | 5 |
| 104 | Whitney Young Condos | AC | CC-15278 | 4 |
| 105 | Worthington Galena/ Mentor Dr. Imp. | AC | 2764-E | 7 |
| 106 | Worthington Green | AC | CC-15681 | 10 |
| 107 | Yenkin-Majestic Paint Rail Imps. | AC | CC-15960 | 3 |
| 108 | Clover groff Stream Restoration Ph. 2 | BD | CC-15765 | 13 |
| 109 | Cypress Wesleyan Church Parking Ex | BD | CC-15859 | 6 |
| 110 | Abbie Cove Apartments | BL | CC-15831 | 1 |
| 111 | Abbie Trails Drive | BL | 2992-E | 1 |
| 112 | AG Auto LLC | BL | CC-16111 | 3 |
| 113 | Alliance Data - Amercana Pkwy | BL | CC-16222 | 3 |
| 114 | Arbors at Turnberry | BL | CC-15796 | 6 |
| 115 | Bedford Place | BL | CC-14694 | 3 |
| 116 | Blacklick Creek Imp | BL | Complaint | 1 |
| 117 | Blacklick Creek Stream Restoration | BL | CC-16245 | 1 |
| 118 | Blacklick Crk GBP Rec Trl Ph 10 | BL | 2704-E | 6 |
| 119 | Blacklick Crk Greenway Trail | BL | CC-15666 | 6 |
| 120 | Brice Rd \& E Broad St Street Impr | BL | 2867-E | 9 |
| 121 | Broad St Villas | BL | CC-14789 | 2 |
| 122 | Cedar Run, Sect. 1 | BL | 4425-D | 6 |
| 123 | Cedar Run, Sect. 2 | BL | 4449-D | 6 |
| 124 | Cedar Run, Sect. 3 | BL | 4461-D | 6 |
| 125 | Cobbleton Grove Condos | BL | CC-14774 | 5 |
| 126 | Creekstone Sec. 2 PT. 3 | BL | 4347-D | 6 |
| 127 | Creekstone-Sect. 2 PT. 4 | BL | 4346-D | 3 |
| 128 | Diafuku Am Corp | BL | CC-16086 | 10 |
| 129 | Dorchester Green Condos | BL | CC-13385 | 7 |
| 130 | Dorchester, Sec. 3 | BL | 4454-D | 7 |
| 131 | Dorchester, Sect. 2 | BL | 4452-D | 7 |
| 132 | Gender \& Refugee Rd (RLC) | BL | 2934-E | 1 |
| 133 | Grand Reserve @ Reynolds C. PHI | BL | CC-14522 | 10 |
| 134 | Hines Rd DOW Storage Tank | BL | CC-15901 | 4 |
| 135 | Lakes @, Taylor Station Sec. 3 | BL | CC-15097 | 8 |
| 136 | Lakes @ Taylor Station Sec.4 Pts 1-3 | BL | CC-15593 | 9 |
| 137 | Lakes @) Taylor Station Sect. 5 | BL | CC-16114 | 5 |
| 138 | Longwood Basin (COMPLAINT) | BL | 4334-D | 3 |
| 139 | McNeil Farms | BL | Complaint | 1 |
| 140 | Meadows@ Shannon Lakes Sec 1 | BL | 4415-D | 6 |
| 141 | Meadows @ Shannon Lakes Sec 2, 3 | BL | 4437-D | 6 |

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## 2012 SWP3 Construction Site Inspections

Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 142 | Menard's Mass Excavation | BL | CC-15935 | 12 |
| 143 | Menard's Mass Excavation | BL | CC-15907 | 6 |
| 144 | NTB | BL | CC-16131 | 5 |
| 145 | Office Redevelopment | BL | CC-16161 | 1 |
| 146 | Ohio Mulch 225 Business Center Dr. | BL | CC-15950 | 5 |
| 147 | Raising Canes - 6511 E Broad St | BL | CC-16183 | 4 |
| 148 | Ravines at Waggoner Park, Ph2 | BL | CC-12966 | 3 |
| 149 | Rec \& Parks Demo Work @ Shannon Green | BL | Complaint | 1 |
| 150 | Refugee Rd 54" Storm | BL | CC-15377 | 6 |
| 151 | Reynolds Crossing Sec. 2 | BL | CC-15935 | 9 |
| 152 | Reynolds Crossing, Sect. 1-1 \& 1-2 | BL | 2103-E | 9 |
| 153 | Speedway - 6399 Refugee Rd | BL | CC-15927 | 7 |
| 154 | St Imp Rossehill \& E Broad | BL | Complaint | 1 |
| 155 | Stonehill, Sec. 1, Pts 1-3 | BL | 1961-E | 7 |
| 156 | SWI Refugee \& Gender Rd's | BL | 2865-E | 5 |
| 157 | Town Sqr Villages @ Shannon Rd | BL | CC-13192 | 5 |
| 158 | Turnberry Sec 2 | BL | 3847-D | 2 |
| 159 | Turnberry Sec 7 | BL | 4400-D | 2 |
| 160 | V. Abbie Trails Sec 1 | BL | 4385-D | 6 |
| 161 | V. Abbie Trails Sec 2 | BL | 4404-D | 6 |
| 162 | V. Abbie Trails Sec 3 | BL | 2130-E | 6 |
| 163 | Village @ Reynolds Crossing Sec. 1 | BL | CC-13941 | 9 |
| 164 | Villages @ Waggoner Park Ph 2 | BL | CC-15535 | 3 |
| 165 | Villages at Waggoner Park | BL | CC-12347 | 3 |
| 166 | Waggoner Chase, Sect. 2 | BL | 4253-D | 6 |
| 167 | Waggoner Park Ph. 3 | BL | CC-13040 | 3 |
| 168 | Waggoner Trace, Sec. 1 | BL | 4455-D | 6 |
| 169 | Waggoner Trace, Sec. 2, Pt 1\&2 | BL | 4460-D | 7 |
| 170 | 4575 E Fifth Av | BW | Grade \& Fill | 1 |
| 171 | 4600 International Gateway | BW | Demolition | 2 |
| 172 | 6320 Tussing Road - Taco Bell | BW | CC-16147 | 3 |
| 173 | Albany Landing Ph. 1, 2 \& 3 | BW | CC-15664 | 18 |
| 174 | Amberfield @ Big Walnut (Sect. 2) | BW | 4436-D | 2 |
| 175 | Amberfield at Big Walnut Pt. 1 | BW | 4396-D | 2 |
| 176 | Archer Daniels Midland - ADM | BW | CC-16057 | 5 |
| 177 | Asherton Grove Condos | BW | CC-15231 | 21 |
| 178 | Big Walnut Creek (Utiity Work) | BW | Complaint | 1 |
| 179 | Bridgeway Ave Regional Basin | BW | CC-15878 | 8 |
| 180 | Bridgeway Ave. | BW | 2850-E | 8 |
| 181 | Buckeye Pride Storage | BW | CC-15882 | 3 |
| 182 | Carnegie Cove/ Eastwood Villas Ret. Basin | BW | CC-13665 | 3 |
| 183 | Chatterton Rd 24" Watermain | BW | WATER | 3 |
| 184 | Chelsea Sq. West | BW | CC-16230 | 6 |
| 185 | Christ Cathedral Church | BW | CC-15660 | 5 |
| 186 | CNG Fuel Facility - Groves Rd | BW | CC-18597 | 6 |
| 187 | E Broad St @, Taylor Stn Rd (RLC) | BW | 2933-E | 3 |
| 188 | E Livingston Over Big Walnut | BW | FRA-CR15-7.56 | 7 |

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## 2012 SWP3 Construction Site Inspections

Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 189 | E Main St @ McNaughten Rd (RLC) | BW | 2935-E | 2 |
| 190 | East Landings Sect 1 Parts 1\&2 | BW | 2022-E | 6 |
| 191 | Eastwood Villas Condos | BW | CC-13747 | 3 |
| 192 | Gates of McNaughten | BW | 4421-D | 1 |
| 193 | Germain Mazda | BW | CC-16008 | 16 |
| 194 | Germain Nissan | BW | CC-15968 | 10 |
| 195 | Hamilton Rd Senior Housing | BW | CC-16243 | 2 |
| 196 | HAP Cremean Lagoon 3 | BW | Grade \& Fill | 9 |
| 197 | HAP Cremean Water Plant Drainage Imp | BW | CC-16261 | 2 |
| 198 | Idlewild Dr. Storm Impry | BW | CC-13366 | 9 |
| 199 | Kimberly Pkwy SI | BW | 2828-E | 3 |
| 200 | Lakes @ Taylor Station | BW | CC-14276 | 8 |
| 201 | Lakes@Taylor Station Sec. 2 | BW | CC-14791 | 5 |
| 202 | Laurel Cannon Church | BW | CC-15977 | 7 |
| 203 | Liberty Elementary School | BW | CC-15877 | 9 |
| 204 | Masjid Oumar Al-Foutiyou, 4561 Refugee | BW | CC-15475 | 7 |
| 205 | MCE Chiller Bldg | BW | CC-16093 | 7 |
| 206 | McNaughten Rd SI | BW | 2864-E | 6 |
| 207 | Morse Rd. Eco-Station | BW | CC-15762 | 12 |
| 208 | N James Rd Imps | BW | 2922-E | 4 |
| 209 | Net Jets Headquarters | BW | CC-15865 | 6 |
| 210 | New Albany Apartments | BW | CC-16029 | 17 |
| 211 | New Albany Apartments | BW | Grade \& Fill | 5 |
| 212 | Noe Bixby Rehab @ Big Walnut Creek | BW | 1687-A | 1 |
| 213 | Olde Orchard Elem | BW | CC-15854 | 9 |
| 214 | Olde Orchard Rd SI | BW | 2883-E | 9 |
| 215 | Pet Suites | BW | CC-16250 | 2 |
| 216 | Port Columbus - Welcome Zone | BW | CC-15964 | 15 |
| 217 | Port Columbus Golf Course | BW | CC-15898 | 5 |
| 218 | Port Columbus Runway Replacement | BW | CC-15848 | 8 |
| 219 | Prince of Peace Lutheran Church | BW | CC-16110 | 2 |
| 220 | Ravines at Broadview | BW | CC-13550 | 22 |
| 221 | Ravines of McNaughten PH3 | BW | CC-13589 | 1 |
| 222 | Refugee Rd SWI | BW | 2847-E | 4 |
| 223 | Reserve at McNaughten | BW | 4453-D | 2 |
| 224 | Reservoir PRP Site 14 (Pollution Reduction Project) | BW | CC-15608 | 3 |
| 225 | Reservoir PRP Site 14, 15 | BW | CC-15608 | 2 |
| 226 | Reservoir PRP Site 14, 15, 16 | BW | CC-15608 | 3 |
| 227 | Reservoir PRP Site 14, 15, 16, 18 | BW | CC-15608 | 1 |
| 228 | Reservoir PRP Site 14, 17 | BW | CC-15608 | 3 |
| 229 | Reservoir PRP Site 14,18 | BW | CC-15608 | 2 |
| 230 | Reservoir PRP Site 15 | BW | CC-15608 | 3 |
| 231 | Reservoir PRP Site 15, 16 | BW | CC-15608 | 3 |
| 232 | Reservoir PRP Site 15, 16, 18 | BW | CC-15608 | 1 |
| 233 | Reservoir PRP Site 16 | BW | CC-15608 | 5 |
| 234 | Reservoir PRP Site 16, 18 | BW | CC-15608 | 1 |
| 235 | Reservoir PRP Site 18 | BW | CC-15608 | 5 |

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## 2012 SWP3 Construction Site Inspections

Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 236 | Reservoir PRP Site 21 | BW | CC-15608 | 7 |
| 237 | Reservoir PRP Site 26 | BW | CC-15608 | 10 |
| 238 | Reservoir PRP Site 26, 14 | BW | CC-15608 | 1 |
| 239 | Reservoir PRP Site 26, 14, 15, 16 and 17 | BW | CC-15608 | 2 |
| 240 | Reservoir PRP Site 26, 15, 16 | BW | CC-15608 | 2 |
| 241 | Reservoir PRP Site 26, 21, 18,14, 15,16 | BW | CC-15608 | 1 |
| 242 | Ridge at Chestnut Hill Ph. 2 | BW | CC-15688 | 2 |
| 243 | S Hamilton AV@) Refugee Rd (RLC) | BW | 2918-E | 1 |
| 244 | Shook Rd | BW | 2873-E | 1 |
| 245 | Shook Rd PH 1 | BW | 2582-E | 3 |
| 246 | Taco Bell | BW | CC-15817 | 3 |
| 247 | Tire Discounters on S. Hamilton Rd | BW | CC-16170 | 10 |
| 248 | Tire Discounters S Hamilton Rd | BW | CC-16109 | 5 |
| 249 | Towne Park Sec. 1 | BW | CC-14269 | 22 |
| 250 | Towne Park Sec. 2 | BW | CC-14814 | 15 |
| 251 | Towne Park Sec. 3 | BW | CC-15586 | 22 |
| 252 | Transmission Shop on Refugee | BW | CC-15686 | 7 |
| 253 | Turkey Run Detention at Port Columbus | BW | CC-15837 | 12 |
| 254 | Upper Albany West Sec 1 | BW | 2058-E | 20 |
| 255 | Upper Albany West Sec 2 | BW | 2205-E | 21 |
| 256 | Upper Albany West Sec 3 | BW | 2290-E | 21 |
| 257 | Upper Albany West Sec 3 | BW | 2754-E | 21 |
| 258 | Upper Albany West Sec 6 | BW | 2058-E | 16 |
| 259 | Village at Albany Crossing Sec. 3 | BW | CC-14267 | 20 |
| 260 | Village at Albany Crossing Sec. 7 | BW | CC-15904 | 21 |
| 261 | Village at Albany Crossing Sec. 8 | BW | CC-16130 | 12 |
| 262 | VSP - 2605 Rohr Rd | BW | CC-16208 | 3 |
| 263 | Warner Rd. | BW | CC-16112 | 8 |
| 264 | Winchester Bend Apts | BW | CC-15831 | 8 |
| 265 | Woodlands Community | BW | CC-15782 | 3 |
| 266 | Ashbrook Run Ph. 1-3 | LW | CC-15286 | 7 |
| 267 | Ashbrook Run Ph. 4 | LW | CC-15825 | 7 |
| 268 | Chatterton Villas/ Commons | LW | CC-12851 | 3 |
| 269 | Chelsea Glen Commercial | LW | CC-14626 | 4 |
| 270 | Chelsea Glen SI | LW | 2852-E | 6 |
| 271 | Cleared Parcel on Lehman Rd | LW | Complaint | 1 |
| 272 | Family Dollar | LW | CC-16226 | 1 |
| 273 | Gender Rd - PH 2 | LW | 2893-E | 2 |
| 274 | Gender Rd East SWI | LW | 2874-E | 2 |
| 275 | Gender Rd Office Pk \& Approach/ SI | LW | 2248-E | 4 |
| 276 | Glen at Schirm Farms PH 1-5 | LW | CC-13531 | 7 |
| 277 | Lehman Estates, Section 1 | LW | 4097-D | 4 |
| 278 | Lehman Estates, Section 5 | LW | 4417-D | 4 |
| 279 | Lehman Meadows | LW | 2222-E | 4 |
| 280 | Lehman Road Storm Ditch Impr | LW | Complaint | 1 |
| 281 | Private Drives at Winchester/Gender | LW | CC-16176 | 1 |
| 282 | Trails at Chatterton East, Section 1 | LW | 2216-E | 6 |

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## 2012 SWP3 Construction Site Inspections

Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 283 | Village at Schirm Farms | LW | CC-12987 | 1 |
| 284 | White Ash Part 1 | LW | 4352-D | 1 |
| 285 | Whiteoak Multifamily Dev | LW | CC-13224 | 7 |
| 286 | Whiteoak Multifamily Dev Sec. 2 | LW | CC-16012 | 4 |
| 287 | Whiteoak Multifamily Dev. Sec. 2 | LW | Prelim | 3 |
| 288 | 1555 Olentangy River Rd | OL | CC-16017 | 5 |
| 289 | 1836 Hamlet | OL | Complaint | 1 |
| 290 | 36 E. Norwich | OL | CC-16166 | 2 |
| 291 | 3M Demo 4th St. \& 6th Ave. | OL | Complaint | 8 |
| 292 | 3M Demo/Soil Remediation - 1206 N 4th St | OL | Demolition | 2 |
| 293 | 3rd Ave Comm. Duct Bank | OL | Complaint | 3 |
| 294 | 4400 N. High St. Bldg. A | OL | CC-15751 | 7 |
| 295 | 5th Ave. Dam Removal | OL | CC-15943 | 5 |
| 296 | 5th Ave. Dam Removal | OL | Complaint | 1 |
| 297 | 807 Kinnear Road Office | OL | CC-16091 | 9 |
| 298 | 869 Cook Rd. Water Line | OL | Complaint | 1 |
| 299 | 955 West Fifth Ave | OL | CC-15858 | 4 |
| 300 | AEP | OL | Complaint | 1 |
| 301 | AEP Substation OSU | OL | OSU | 12 |
| 302 | AEP Tunnel | OL | Complaint | 8 |
| 303 | Aveda Parking Lot | OL | CC-16020 | 4 |
| 304 | Benchmark Apts. | OL | CC-16052 | 9 |
| 305 | Bethel United Presb. Church | OL | CC-16215 | 3 |
| 306 | Bethel Uniyed Presbyterian Church | OL | CC-16070 | 10 |
| 307 | Busch Blvd. \& Shapter | OL | 2919-E | 2 |
| 308 | Calumet St. Bridge | OL | 1670-A | 1 |
| 309 | Canyon Dr. Area Water Main Imp. | OL | 09-030 | 3 |
| 310 | Cardinal Self Storage | OL | CC-16119 | 5 |
| 311 | Cardinal Self Storage | OL | CC-16162 | 5 |
| 312 | CBEC Bldg. | OL | CC-16101 | 7 |
| 313 | Charleston Ave. | OL | Complaint | 1 |
| 314 | Charleston Drainage Imp. | OL | CC-14534 | 6 |
| 315 | Chesapeake Park Apartments | OL | CC-16225 | 1 |
| 316 | Cleary Co. Kenny Rd. | OL | CC-16098 | 4 |
| 317 | Clinton Elementary | OL | CC-15840 | 9 |
| 318 | Clinton Heights Ave. SWI | OL | 2835-E | 8 |
| 319 | College Rd. \& 11th. Ave. SI | OL | 2861-E | 9 |
| 320 | Cols Coated Fabrics $\sim$ Public Imp Areas | OL | 2726-E | 1 |
| 321 | Columbia Gas Pumping Violation | OL | Complaint | 1 |
| 322 | Columbia Gas-Pumping Violation- N. 4 Th. | OL | Complaint | 1 |
| 323 | Columbia Gas-Walhalla | OL | Complaint | 5 |
| 324 | Columbus Coated Fabric | OL | Grade \& Fill | 10 |
| 325 | Columbus Coated Fabric 6th. St., Ph.-2 | OL | 2846-E | 8 |
| 326 | Commons @ Third | OL | CC-15853 | 8 |
| 327 | Cooke Rd. Waterline (CIP 690236) | OL | Complaint | 1 |
| 328 | COTA Delawanda Park \& Ride | OL | CC-16124 | 5 |
| 329 | Dodridge St. Bridge | OL | FRAcr52-4.4 | 1 |

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Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 330 | E Hudson \& High Apts | OL | Complaint | 1 |
| 331 | Fairfield Inn Outlot | OL | Complaint | 3 |
| 332 | Fairfield Inn Outlots | OL | Demolition | 3 |
| 333 | Field Hockey / Outdoor Tennis Complex | OL | CC-15473 | 2 |
| 334 | Fifth Third Bank | OL | CC-16132 | 7 |
| 335 | First Ave Inflow Redirect | OL | CC-16002 | 2 |
| 336 | Fransisco Glen | OL | 2299-E | 9 |
| 337 | Freeway Business Park | OL | CC-16276 | 2 |
| 338 | Freeway Business Park | OL | Demolition | 2 |
| 339 | Giant Eagle on Third Ave. | OL | CC-16150 | 10 |
| 340 | Goodale Urban Multi-Family | OL | CC-16044 | 13 |
| 341 | Graceland Water Line | OL | 12-162 | 2 |
| 342 | Grant Ave SI | OL | 2726-E | 4 |
| 343 | Grant Ave Utility Imp. 5th to 11th | OL | CC-15672 | 8 |
| 344 | Habitat Lots | OL | Complaint | 7 |
| 345 | Hale Hall/ South Oval Geothermal | OL | CC-15955 | 26 |
| 346 | Haley Hollow | OL | 4393-D | 8 |
| 347 | Hard Rd. Park | OL | CC-16056 | 9 |
| 348 | Hard Rd. Park | OL | Complaint | 1 |
| 349 | Hard Rd. Park / Site Compliance | OL | Complaint | 9 |
| 350 | Harrison Park | OL | 2124-E | 13 |
| 351 | Henderson Rd. Development | OL | CC-16143 | 4 |
| 352 | Hollywood Casino Demo | OL | CC-15707 | 1 |
| 353 | Hollywood Casino Grade \& Fill | OL | CC-15707 | 12 |
| 354 | Hudson \& High Apts | OL | CC-13561 | 3 |
| 355 | IHOP on Sawmill Rd | OL | CC-16050 | 5 |
| 356 | Kempton Run | OL | 4444-D | 8 |
| 357 | Kinnear Road Redevelopment | OL | CC-16027 | 13 |
| 358 | Lenappe/Canyon Dr. Storm Water Imp | OL | CC-15663 | 3 |
| 359 | Liberty Crossing | OL | Grade\&Fill | 11 |
| 360 | Lindsey Woods (Newbury) | OL | 2017-E | 9 |
| 361 | Lindsy Woods (Romanelli \& Hughes) | OL | 2017-E | 9 |
| 362 | Linworth Woods | OL | 4370-D | 10 |
| 363 | Logans Roadhouse | OL | CC-15993 | 3 |
| 364 | Marland Dr. Bridge Replacement | OL | 2943-E | 4 |
| 365 | McAllister Crossing | OL | 2239-E | 8 |
| 366 | McCullough's Tree Service | OL | CC-16185 | 4 |
| 367 | McDonald's @ 17th Ave | OL | CC-16105 | 1 |
| 368 | Millay Alley | OL | CC-16160 | 6 |
| 369 | Milo-Grogan Rec. Center | OL | CC-16165 | 3 |
| 370 | Moo Moo Express Car Wash | OL | CC-16145 | 1 |
| 371 | N. 4th. \& E. 8th. | OL | CC-16088 | 4 |
| 372 | N. High St / Westview SI. (COTA) | OL | 2950-E | 5 |
| 373 | N. High St. Layover (COTA) | OL | CC-16157 | 6 |
| 374 | N. High St. SI. | OL | 2805-E | 7 |
| 375 | ODNR State Fairgrounds Improvements | OL | CC-16087 | 4 |
| 376 | Ohio School for the Blind | OL | CC-15565 | 19 |

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## Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 377 | Ohio School for the Deaf | OL | CC-15563 | 19 |
| 378 | Oldstone Crossing Sec. 1 | OL | 4434-D | 12 |
| 379 | Oldstone Crossing Sec. 2 | OL | 2000-E | 11 |
| 380 | Oldstone Crossing Sec. 3 | OL | 2750-E | 12 |
| 381 | Olentangy Meadows Dr. Access Road | OL | 2860-E | 12 |
| 382 | OSU 18th Ave. | OL | CC-16167 | 6 |
| 383 | OSU Basketball Practice Facility | OL | CC-15712 | 6 |
| 384 | OSU Chilled Water Plant | OL | 2949-E | 6 |
| 385 | OSU Chilled Water Plant(Storm) | OL | CC-16159 | 6 |
| 386 | OSU Core North | OL | CC-15886 | 1 |
| 387 | OSU Field Imp. | OL | CC-16125 | 3 |
| 388 | OSU Woodruff \& Tuttle SI | OL | CC-15880 | 8 |
| 389 | Overbrook Sanitary | OL | Complaint | 1 |
| 390 | Pet Suites on 23 North | OL | CC-15731 | 12 |
| 391 | Ravines at Flint Park | OL | CC-14787 | 11 |
| 392 | Reserve at Mercer Square | OL | CC-15338 | 4 |
| 393 | Residence at Liberty Crossing | OL | CC-16072 | 9 |
| 394 | Riverside Hospital Interim Conditions | OL | CC-16120 | 3 |
| 395 | Riverside Methodist Hosp. Mass. Exc. | OL | CC-16149 | 10 |
| 396 | Riverside Methodist Hospital Early Site | OL | CC-16099 | 11 |
| 397 | Riverview Drive Imp | OL | 1769-E | 5 |
| 398 | Seventeenth Ave. Rebuild | OL | CC-15917 | 6 |
| 399 | Skyline Dr. SWI | OL | 2779-E | 3 |
| 400 | South High Rise - Smith \& Steeb | OL | CC-15784 | 9 |
| 401 | South High Rise Tower Renovations | OL | CC-15721 | 9 |
| 402 | Spirit of Women Park | OL | CC-15855 | 5 |
| 403 | St. Clair \& Camden | OL | Complaint | 1 |
| 404 | Tenth Ave. @ Worthington St. SI | OL | 2808-E | 6 |
| 405 | Third Ave CIP | OL | CC-16172 | 1 |
| 406 | Traditions at Highbluffs Ph. 1-4 | OL | CC-14167 | 13 |
| 407 | Tribeca | OL | CC-16074 | 12 |
| 408 | Twelfth Ave. Imp. | OL | CC-16092 | 6 |
| 409 | Union Cemetary | OL | Complaint | 2 |
| 410 | Victorian Village Apts | OL | CC-16196 | 1 |
| 411 | Village at Olentangy Meadows | OL | CC-13756 | 12 |
| 412 | Village at Olentangy Meadows Sec. 2 | OL | 4441-D | 11 |
| 413 | Village at Olentangy Meadows Sec. 4 | OL | 4457-D | 11 |
| 414 | Village at Olentangy Meadows-South | OL | 4443-D | 12 |
| 415 | Village at the Bluffs | OL | CC-14116 | 8 |
| 416 | Water Dept. (Pumping) 4Th. \& Hudson | OL | Complaint | 1 |
| 417 | Weinland Park SI | OL | 2726-E | 4 |
| 418 | Weinland Park-NRP Lots | OL | Complaint | 10 |
| 419 | Weinland Park-Wagenbrenner Lots | OL | Complaint | 9 |
| 420 | Wesley Glen Parking Lot | OL | CC-16065 | 6 |
| 421 | Wesley Glen Pkng Lot - 5155 N High ST | OL | CC-16085 | 1 |
| 422 | Wesley Glen Wellness Add. -5155 N. High | OL | CC-15826 | 7 |
| 423 | Whetstone Center / Ohio Health | OL | Demolition | 5 |

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| :---: | :---: | :---: | :---: | :---: |
| 424 | Whetstone Park | OL | Complaint | 1 |
| 425 | William H Hall Complex | OL | CC-15806 | 7 |
| 426 | Windsor Pool Impr. | OL | CC-15958 | 8 |
| 427 | Albany Crossing Sec. 5 | RF | CC-15385 | 21 |
| 428 | Albany Reserve Condos | RF | CC-14036 | 20 |
| 429 | Albany Station Condos | RF | CC-14017 | 1 |
| 430 | Bridgestone/Firestone | RF | CC-15947 | 2 |
| 431 | Caleb's Creek | RF | CC-16037 | 20 |
| 432 | Chelsea Square | RF | CC-15889 | 24 |
| 433 | Cornerstone Academy | RF | CC-16128 | 5 |
| 434 | CVS on Warner Rd. | RF | CC-15727 | 9 |
| 435 | Dent Solutions | RF | CC-15208 | 2 |
| 436 | Dent Solutions (Complaint) | RF | CC-13923 | 1 |
| 437 | Farms at New Albany Park | RF | CC-15281 | 13 |
| 438 | Fodor Rd \& New Albany Rd Roundabout | RF | 2787-E | 1 |
| 439 | Glenabby Condos | RF | CC-13763 | 11 |
| 440 | New Albany Care Center | RF | CC-15941 | 10 |
| 441 | New Albany Market McDonald's | RF | CC-15948 | 2 |
| 442 | Overland Park | RF | CC-16073 | 13 |
| 443 | Preserve Crossing Blvd. | RF | Complaint | 1 |
| 444 | Preserve Crossing Condos Ph, 4 | RF | CC-14769 | 24 |
| 445 | Preserve Crossing Ph. 2 \& 3 | RF | CC-14101 | 4 |
| 446 | Reserve at Preston Woods | RF | CC-14308 | 22 |
| 447 | Southland Self Storage | RF | CC-15566 | 1 |
| 448 | The Hamptons | RF | CC-15143 | 13 |
| 449 | Town Sq. Villages at Preserve Crossing | RF | CC-14073 | 11 |
| 450 | Traditions at Rocky Fork | RF | CC-14108 | 22 |
| 451 | Upper Albany West Sec 6, Ph 1 \& 2. | RF | 2832-E | 10 |
| 452 | Village at Albany Crossing Sec. 1 | RF | CC-13883 | 19 |
| 453 | Village at Albany Crossing Sec. 2 | RF | 2065-E | 19 |
| 454 | Village at Albany Crossing Sec. 6 | RF | 2813-E | 21 |
| 455 | Village at Preserve Crossing Ph. 4 Part 2 | RF | CC-16192 | 13 |
| 456 | Village at Preston Woods | RF | CC-15991 | 18 |
| 457 | Villas at Sugar Run Ph. 1 | RF | CC-14874 | 22 |
| 458 | Villas at Sugar Run Ph. 2 | RF | CC-15389 | 22 |
| 459 | Villas at West Albany | RF | CC-14665 | 22 |
| 460 | Warner \& Hamilton SWI | RF | 2793-E | 3 |
| 461 | Willows at Preserve Crossing Sec. 1 | RF | CC-13445 | 23 |
| 462 | Willows Crossing | RF | CC-15973 | 24 |
| 463 | 1302 S Champion AV | SC | Complaint | 2 |
| 464 | 166 Woodland Av | SC | CC-15832 | 1 |
| 465 | 2233 Hardy Parkway Street | SC | Grade \& Fill | 14 |
| 466 | 262-280 Hanover St. | SC | CC-16060 | 6 |
| 467 | 3764 Christie RdE | SC | Complaint | 1 |
| 468 | 393 S Ohio Ave. | SC | Complaint | 1 |
| 469 | 407 N Brinker | SC | Complaint | 11 |
| 470 | 425 W. Nationwide Blyd | SC | CC-16051 | 13 |

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| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 471 | 567 E Livingston Av | SC | Complaint | 3 |
| 472 | 5Th. \& Cleveland Ave(Pumping) | SC | Complaint | 1 |
| 473 | 905 E. Long St. | SC | CC-16003 | 6 |
| 474 | 940-950 E Broad ST. (Parking Lot) | SC | CC-16193 | 4 |
| 475 | A Y Manufacturing LTD | SC | CC-16220 | 5 |
| 476 | Alkire Run 1 | SC | 4426-D | 13 |
| 477 | Alkire Run 1 \& 2 | SC | 4463-D | 14 |
| 478 | Alkire Woods | SC | CC-13950 | 14 |
| 479 | Allied Mineral | SC | CC-16320 | 1 |
| 480 | Alum Crest / Clearbrook School | SC | CC-16033 | 19 |
| 481 | Arena West Development | SC | CC-16071 | 13 |
| 482 | Arena West Private Drive | SC | CC-16134 | 4 |
| 483 | Ashton Point | SC | 4412-D | 15 |
| 484 | Auto Care Center | SC | CC-14472 | 12 |
| 485 | Auto Max on Billingsley | SC | CC-16201 | 5 |
| 486 | Avery Place | SC | CC-13876 | 7 |
| 487 | Avery Rd. SI | SC | 2841-E | 5 |
| 488 | Bartfield SI | SC | 2819-E | 6 |
| 489 | Berliner Park San Sewer Imp. | SC | CC-15695 | 14 |
| 490 | Big Lots Substation | SC | CC-15952 | 1 |
| 491 | Big Run Ridge 1 | SC | 4427-D | 14 |
| 492 | Big Run Ridge 2 | SC | 4435-D | 14 |
| 493 | BIR, Chilled Water SU | SC | CC-16144 | 1 |
| 494 | Bobby Layman Chevrolet | SC | CC-16204 | 6 |
| 495 | Born Brewery Building | SC | CC-16078 | 6 |
| 496 | Brittany Place Sec. 2 | SC | CC-15336 | 7 |
| 497 | Brittany Place Sec. 1 | SC | CC-14382 | 9 |
| 498 | Broadway | SC | CC-14409 | 8 |
| 499 | Brookfield Village Apts. | SC | CC-16101 | 13 |
| 500 | Bulen Ave. Storm Improvement | SC | CC-15584 | 5 |
| 501 | Campbell Oil | SC | CC-15980 | 11 |
| 502 | Cardinal Self Storage | SC | CC-15962 | 5 |
| 503 | CCS Georgian Heights Elementary | SC | CC-15753 | 10 |
| 504 | Cedarwood Elem School | SC | CC-15804 | 7 |
| 505 | Central Ohio Oil/Oil Works | SC | CC-15954 | 1 |
| 506 | Certified Oil Corp. | SC | CC-16189 | 6 |
| 507 | Champion Ave - Whittier St | SC | Complaint | 1 |
| 508 | CHN Inglewood Court | SC | CC-15995 | 11 |
| 509 | CMHA Franklinton Station | SC | CC-16007 | 11 |
| 510 | Columbia Gas Offices | SC | CC-16315 | 1 |
| 511 | Columbus Commons Mixed Use | SC | CC-16238 | 4 |
| 512 | Columbus State Union Hall Renov. | SC | CC-15987 | 10 |
| 513 | Compost Diversion Swale | SC | CIP-611051 | 3 |
| 514 | Cota McKinley Ave. | SC | CC-16209 | 4 |
| 515 | CPD Property Facility | SC | CC-15894 | 6 |
| 516 | CSX Intermodal Terminal Part A | SC | CC-15997 | 9 |
| 517 | CSX Intermodal Terminal Part B | SC | CC-16089 | 9 |

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| :---: | :---: | :---: | :---: | :---: |
| 518 | CVS Pharmacy | SC | CC-15926 | 7 |
| 519 | Dan Tobin Buick | SC | CC-15165 | 2 |
| 520 | Dodge Pool Imp. | SC | CC-15956 | 9 |
| 521 | Dollar General - 1403 E Main St | SC | CC-16214 | 4 |
| 522 | Dollar General - Main St \& McCallister Av SI | SC | 2987-E | 1 |
| 523 | E Long St \& N 17th St SI | SC | 2894-E | 3 |
| 524 | Easy Pay Auto Sales | SC | CC-15460 | 7 |
| 525 | Fairfield Inn Suites | SC | CC-15082 | 6 |
| 526 | Fairwood Av Impr North of Watkins Rd | SC | 2552-E | 5 |
| 527 | Fairwood Av Impr South of Watkins Rd | SC | CC-15810 | 4 |
| 528 | Fisher Road Booster Station | SC | CC-15560 | 10 |
| 529 | Fisher Road Gravel Lot | SC | CC-15363 | 3 |
| 530 | Flats 2 | SC | CC-16285 | 1 |
| 531 | Fort Hayes Implementation | SC | CC-16047 | 10 |
| 532 | Friendship Village of Dublin-Villas | SC | CC-15735 | 9 |
| 533 | Fulton / Mound / Noble CS Rehab. | SC | CC-15613 | 2 |
| 534 | Gabriels Landing | SC | CC-14418 | 8 |
| 535 | Galloway Ridge 8 | SC | 4391-D | 14 |
| 536 | Germain Ford on Sawmill | SC | CC-16210 | 2 |
| 537 | Grandview Fill Site on Dublin Road | SC | Grade \& Fill | 9 |
| 538 | Grandview Retail Center | SC | CC-15419 | 12 |
| 539 | Great Oaks 1 | SC | 4451-D | 14 |
| 540 | Hardy Parkway Street Imp | SC | 2862-E | 4 |
| 541 | Hartman Ponds 1 | SC | 4424-D | 14 |
| 542 | Hartman Ponds 2 | SC | 2291-E | 14 |
| 543 | Hayden Crossing 2 | SC | CC-13925 | 1 |
| 544 | Hayden Crossing Sec. 2 | SC | CC-13529 | 9 |
| 545 | Hayden Crossing Sec. 3 | SC | CC-13926 | 8 |
| 546 | Hayden Crossing Sec. 8 | SC | CC-16172 | 4 |
| 547 | Hayden Crossing Sec. 9 | SC | CC-16237 | 3 |
| 548 | Hayden Crossing South and Sec. 5 | SC | CC-14208 | 16 |
| 549 | Hayden Farms Sec. 4 \& 5 | SC | CC-14466 | 8 |
| 550 | Hayden Farms-3 | SC | 2227-E | 6 |
| 551 | Hayden Farms-4 | SC | 2275-E | 6 |
| 552 | Hayden Farms-5 | SC | 2350-E | 9 |
| 553 | Hayden Run Blvd Pt.-2 | SC | 2302-E | 1 |
| 554 | Haydens Crossing Sec. 4 | SC | CC-14271 | 9 |
| 555 | Haydens Crossing Sec. 6 | SC | CC-14333 | 9 |
| 556 | Haydens Crossing Sec. 6 Pt. 3 | SC | CC-15744 | 10 |
| 557 | Hayden's Reserve | SC | CC-14353 | 11 |
| 558 | Hayward Distributing | SC | CC-16233 | 3 |
| 559 | Heidelberg Distributing Parking Addition | SC | CC-16229 | 6 |
| 560 | Heidelburg Distributing Parking Addition | SC | CC-15945 | 9 |
| 561 | Heinzerling Outdoor Learning | SC | CC-15923 | 8 |
| 562 | Hilltop Branch YMCA | SC | CC-16206 | 2 |
| 563 | Hilltop Gasline Replacement | SC | Complaint | 3 |
| 564 | Hilton Columbus Downtown | SC | CC-15800 | 13 |

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| :---: | :---: | :---: | :---: | :---: |
| 565 | Hilton Columbus Downtown Imp | SC | 2820-E | 13 |
| 566 | Hollywood Casino | SC | CC-15981 | 11 |
| 567 | Hollywood Casino | SC | CC-15984 | 3 |
| 568 | Hollywood Casino / Old site | SC | Complaint | 1 |
| 569 | House of Blessings Worship Center | SC | CC-15502 | 14 |
| 570 | I-Hop on Renner | SC | CC-15970 | 6 |
| 571 | Jackson Pike Additions | SC | CC-15829 | 13 |
| 572 | Jeffrey Place 1 | SC | 1784-E | 6 |
| 573 | Jeffrey Place Ph. 2 | SC | 1784-E | 7 |
| 574 | Karric Square | SC | CC-15891 | 3 |
| 575 | Lane Woods | SC | CC-12360 | 12 |
| 576 | Langford Meadows 5 | SC | 2032-E | 14 |
| 577 | Liberty Place Condos 2 | SC | CC-15440 | 12 |
| 578 | Livingston \& Parsons Ave SI | SC | 2637-E | 4 |
| 579 | Livingston Ave Watermain IMP | SC | CC-15516 | 1 |
| 580 | Livingston Park | SC | CC-15763 | 1 |
| 581 | Lockbourne Rd \& Smith Rd | SC | Complaint | 4 |
| 582 | Long Street Apts | SC | CC-16207 | 3 |
| 583 | Marble Cliff Crossings | SC | 4115-D | 12 |
| 584 | Marion Rd Swimming Pool Imp | SC | CC-15957 | 8 |
| 585 | Maryland \& Denver Ave. - CIP | SC | CC-15716 | 2 |
| 586 | McDonalds @ Mound Street | SC | CC-16049 | 4 |
| 587 | McDonalds Rebuild | SC | CC-16221 | 2 |
| 588 | Mercer Square Phase 2 | SC | CC-15692 | 10 |
| 589 | Monarch Greene | SC | 2807-E | 12 |
| 590 | Monesi Trucking | SC | Complaint | 1 |
| 591 | Mooberry SI | SC | 2715-E | 9 |
| 592 | National Lime \& Stone Co. | SC | CC-16117 | 9 |
| 593 | National Lime \& Stone Concrete Recycling | SC | CC-15433 | 3 |
| 594 | Nationwide Corp. Center | SC | CC-16063 | 13 |
| 595 | NCH (Leased) Parking Lot | SC | Complaint | 4 |
| 596 | NCH BHS \& ADOL Clinic | SC | 2838-E | 1 |
| 597 | NCH Central Campus Imp. | SC | CC-16164 | 5 |
| 598 | NCH Parking Lot - 793 E Livingston Av | SC | CC-16043 | 7 |
| 599 | NCH Parking Lot Addition - 6435 E Broad St | SC | CC-15974 | 6 |
| 600 | NCH Parking Lot Reconstructiom | SC | CC-16202 | 3 |
| 601 | NCH Replacement Hospital | SC | CC-15540 | 5 |
| 602 | NCH Research BLDG 3 | SC | CC-15693 | 3 |
| 603 | New Market Mall | SC | CC-15921 | 11 |
| 604 | North Broadway SWI | SC | Complaint | 1 |
| 605 | North Grove | SC | 4442-D | 14 |
| 606 | OARS Ph. 2 | SC | CC-15838 | 13 |
| 607 | Ohio Expo North Parking Lot Imp. | SC | CC-15715 | 1 |
| 608 | Old Columbus Police Station | SC | CC-15558 | 14 |
| 609 | Olive Garden Restaurant | SC | CC-16191 | 6 |
| 610 | OSIS Augmentation \& Relief | SC | CC-15838 | 6 |
| 611 | OSIS Augmentation \& Relief Shaft 1 | SC | CC-15684 | 8 |

Legend for Watersheds: AC - Alum Creek, BD - Big Darby, BL - Blacklick Creek, BW - Big Walnut Creek, LW - Little Walnut Creek, OL - Olentangy River, RF - Rocky Fork Creek, SC - Scioto River

## 2012 SWP3 Construction Site Inspections

Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| \# | Project Name | Watershed | Plan Number | Site Visits 2012 |
| :---: | :---: | :---: | :---: | :---: |
| 612 | OSIS Augmentation \& Relief Shaft 1 \& 2 | SC | CC-15684 | 5 |
| 613 | OSIS Augmentation \& Relief Shaft 3 | SC | CC-15838 | 10 |
| 614 | OSIS Augmentation \& Relief Shaft 4 | SC | CC-15838 | 11 |
| 615 | OSIS Augmentation Jackson Pike | SC | CC-15684 | 1 |
| 616 | OSIS Jobs | SC | Complaint | 1 |
| 617 | OSIS Odor Control CIP | SC | CC-15720 | 16 |
| 618 | OSIS Odor Control CIP Shaft 4 | SC | CC-15720 | 1 |
| 619 | OSIS Odor Control CIP Shaft 5 | SC | CC-15720 | 8 |
| 620 | Paddock at Hayden Run | SC | CC-15803 | 1 |
| 621 | Paddock at Haydens Crossing Ph. 2-C | SC | CC-16064 | 11 |
| 622 | Paddock Ph. 1A | SC | CC-15748 | 4 |
| 623 | Paddock Ph. 1B \& 2 | SC | CC-15803 | 4 |
| 624 | Paddock Ph. 2B \& 2C | SC | CC-15803 | 8 |
| 625 | Panda Express - Hilliard Rome | SC | CC-16154 | 5 |
| 626 | River Bend Road Imp. | SC | 2863-E | 1 |
| 627 | River Highland Condos | SC | CC-13469 | 10 |
| 628 | Riverside \& Birchton SI | SC | 2804-E | 7 |
| 629 | Riverside Bradley | SC | Demolition | 12 |
| 630 | Safford / Union Area CIP | SC | CC-15559 | 6 |
| 631 | Sawmill Rd. @ 161 SWI | SC | 2923-E | 7 |
| 632 | Scioto Audubon Soil Remediation | SC | Grade \& Fill | 13 |
| 633 | Scioto Audubon Southern Tier | SC | CC-16269 | 3 |
| 634 | Scioto Bikeway Connector | SC | Complaint | 2 |
| 635 | Scioto Downs | SC | CC-16104 | 1 |
| 636 | Scioto Pointe | SC | CC-7539 | 7 |
| 637 | Scioto Station Condos | SC | CC-13616 | 1 |
| 638 | Scioto Trail Riversedge / 5th | SC | 2629-E | 1 |
| 639 | Skyview Towers | SC | CC-15959 | 7 |
| 640 | Slatey Hollow | SC | CC-14484 | 7 |
| 641 | South Big Run SI | SC | 2691-E | 11 |
| 642 | South High St. Scioto Downs | SC | 2946-E | 1 |
| 643 | Southside Health Center | SC | CC-16187 | 4 |
| 644 | Spray Ground at Blackburn Park | SC | CC-16310 | 1 |
| 645 | St Philips - 166 Woodland Av | SC | CC-15767 | 1 |
| 646 | Starling Grade School K-8 | SC | CC-15870 | 14 |
| 647 | Stonebridge Crossing | SC | CC-14549 | 9 |
| 648 | Sullivant Ave. Water Line Repair | SC | Complaint | 5 |
| 649 | Sullivant Ave. Water Line Repair | SC | Complaint | 1 |
| 650 | Summerlyn 1 | SC | 4445-D | 14 |
| 651 | Summerlyn 2 | SC | 2353-E | 14 |
| 652 | Sussex Place 1 | SC | 4416-D | 14 |
| 653 | Sussex Place 2 | SC | 2007-E | 14 |
| 654 | Sussex Place 3 | SC | 2212-E | 14 |
| 655 | Taco Bell on Georgesville Rd. | SC | CC-16004 | 6 |
| 656 | Tansky Toyota | SC | CC-16061 | 7 |
| 657 | Tech South (Fortuno Mgmt) | SC | CC-15627 | 5 |
| 658 | The Columbus Jack Offices/Condos | SC | CC-15896 | 1 |

Legend for Watersheds: AC - Alum Creek, BD - Big Darby, BL - Blacklick Creek, BW - Big Walnut Creek, LW - Little Walnut Creek, OL - Olentangy River, RF - Rocky Fork Creek, SC - Scioto River

## 2012 SWP3 Construction Site Inspections

Site Inspection Include: Storm Sewers (Private, Public and CIP's), Sanitary Sewers (CIP's and Stream Crossing), Demo, Misc. Complaints, Grade and Fill Sites

| Project Name | Watershed | Plan Number | Site Visits 2012 |  |
| :---: | :--- | :---: | :---: | :---: |
|  | The Falls @ Hayden Run 3 |  |  | 10 |
| 660 | The Falls @, Hayden Run 5 | SC | CC-15571 | 4 |
| 661 | The Falls at Hayden Run 1 | SC | CC-14092 | 11 |
| 662 | The Falls at Hayden Run 4 | SC | CC-15214 | 5 |
| 663 | The Hubbard | SC | CC-16224 | 3 |
| 664 | The Strathmoor | SC | CC-16242 | 3 |
| 665 | Tim Hortons on Harrisburg Pike | SC | CC-16270 | 3 |
| 666 | Tim Hortons on N. Wilson Rd. | SC | CC-16257 | 2 |
| 667 | Timkin Fill Site | SC | Grade \& Fill | 3 |
| 668 | Trabue Road Self Storage | SC | CC-16097 | 10 |
| 669 | Traditions @, Mill Run | SC | CC-16011 | 11 |
| 670 | V\&S Columbus Galvanizing-987 Buckeye Park Rd | SC | CC-16146 | 4 |
| 671 | Village @ Galloway Run 2 | SC | CC-13318 | 14 |
| 672 | Village @ Hilliard Run | SC | CC-14180 | 13 |
| 673 | Village @) Pine Grove | SC | CC-13638 | 14 |
| 674 | Volunteers of America | SC | CC-15909 | 6 |
| 675 | West Nationwide Blvd. SI | SC | $2944-E$ | 1 |
| 676 | Washington Blvd. \& Rich St. | SC | Complaint | 1 |
| 677 | Wonderbread Apts. | SC | CC-16211 | 6 |
| 678 | Woods at Hayden Run | SC | CC-14640 | 7 |
|  | 678 Independent Sites |  | Total Sites | 4605 |

## City of Columbus 2012 Post Construction BMP <br> Plan Review List

| Project Name | Drawing No | Plan Date | BMP Type |
| :--- | :--- | :--- | :--- |
| Refugee Rd. Sidewalk/Shared Use <br> Path | 2847 Dr. E | 03-Jan-12 | Others (9) |
| Chelsea Glen Drive | 2852 Dr. E | 24-Jan-12 | Proprietary device |
| Tire Discounters South Hamilton <br> Road | cc16109 | 26-Jan-12 | Wet detention basin |
| The Residences at Liberty Crossing | cc16072 | 27-Jan-12 | Wet detention basin |
| Tribeca | cc16074 | 27-Jan-12 | Proprietary device |
| SWACo Morse Rd. Eco-Station | cc15762 | 27-Jan-12 | Proprietary devices (3) \& Wet |
| detention basin (1) |  |  |  |

## City of Columbus <br> 2012 Post Construction BMP <br> Plan Review List

| Project Name | Drawing No | Plan Date | BMP Type |
| :---: | :---: | :---: | :---: |
| Alum Creek SW Mitigation \& Remed. Phase 2 | cc16200 | 15-Aug-12 | Vegetated swale |
| Mariott Hotel (Univeristy Plaza Hotel Retrofit) | cc16171 | 21-Aug-12 | Proprietary device |
| Vision Services Plan | cc16208 | 21-Aug-12 | Dry detention basin |
| Boehringer Ingelheim Roxane Wilson Rd. Complex | cc16144 | 22-Aug-12 | Wet detention basin |
| COTA Essex Ave. Facility | cc16175 | 31-Aug-12 | Dry detention basin |
| Wesbury Park, Dublin-Granville Road Development | cc16223 | 31-Aug-12 | Proprietary device |
| Villages at Preserve Crossing, Phas3 <br> 4, Part 2 | cc16192 | 12-Sep-12 | Wet detention basin |
| COTA McKinley Ave. Phase 2 Renovations | cc16209 | 26-Sep-12 | Proprietary device |
| New Engine House \#35 (City of Cols. Fire Station) | cc16193 | 12-Oct-12 | Dry detention basin |
| Freeway Business Park | cc16276 | 24-Oct-12 | Dry detention basin |
| Scioto Audobon Metro Park. - S. Tier Improvements | cc16269 | 01-Nov-12 | Bioretentions (2) |
| Pet Suites | cc16250 | 05-Nov-12 | Dry detention basin |
| Abbie Cove Apartments | cc16274 | 07-Nov-12 | Wet detention basin |
| The Strathmoor | cc16242 | 07-Nov-12 | Wet detention basins (2) |
| Hamilton Road Senior Housing | cc16243 | 19-Nov-12 | Wet detention basin |
| Hap Cremean Water Plant Drainage Improvements | cc16261 | 20-Nov-12 | Dry detention basin |

City of Columbus
2012 Post Construction BMP Inspection Summary

| Plan No | Plan Title/Name | Columbus WQ Inspection Date | WQ BMPs |
| :---: | :---: | :---: | :---: |
| cc15191 | Ohio Mulch | 01-Jan-12 | Proprietary device |
| cc15021 | DHL - Columbus | 01-Jan-12 | Wet detention basins |
| cc14703 | Meijer Outparcel "D" | 13-Feb-12 | Proprietary device |
| Cc12566 | Speedway | 23-Feb-12 | Proprietary device |
| cc14933 | Speedway | 23-Feb-12 | Dry detention basin |
| cc15233 | Capitol Tunneling, Inc. | 27-Feb-12 | Dry detention basin |
| Cc15591 | Proposed Farber Specialty Vehicles | 27-Feb-12 | Dry detention basin |
| cc14893 | Zion Christian Assembly (Phase \#1) | 27-Feb-12 | Dry detention basin |
| cc14970 | Franklin County Specialty Vehicle Parking Facility | 29-Mar-12 | Dry detention basin |
| Cc15363 | Fisher Road Gravel Lot | 29-Mar-12 | Other |
| cc15135 | Giant Eagle \#6517 | 10-Apr-12 | Proprietary device \& Wet detention basin |
| cc14931 | Gutknecht Office Building Site | 10-Apr-12 | Dry detention basin |
| cc14734 | Highland Pointe | 17-Apr-12 | Proprietary devices (5) |
| cc14981 | Private storm sewer, GetGo Convenience Store \#3512 | 17-Apr-12 | Proprietary device |
| cc15332 | Fairfield Inn at Polaris | 17-Apr-12 | Proprietary device |
| Cc15077 | Value Place Hotel | 17-Apr-12 | Dry detention basin |
| Cc14685 | Easton N. Regional Basin WQ Retrofit | 03-May-12 | Dry detention basins (2) |
| cc15706 | Phase 2 Rumpke of Ohio Building 1 Expansion | 17-May-12 | Proprietary device |
| Cc15618 | Rumpke Site Improvements, Phase I | 17-May-12 | Proprietary devices (2) |
| Cc15348 | The Info Depot LLC | 19-Jun-12 | Dry detention basins (2) |
| cc15299 | 1629 Northwest Blvd. | 26-Jun-12 | Other |
| Cc14827 | Huy Road Elementary School | 26-Jun-12 | Dry detention basin |
| cc15411 | Lifestyles Riversouth | 26-Jun-12 | Proprietary device |
| cc15846 | Jason's Deli | 28-Jun-12 | Bioretention |
| cc15857 | JP Morgan Chase Lot X Expansion | 28-Jun-12 | Wet detention basin |
| Cc15893 | The Mall at Tuttle Crossing/(was BJ's Restaurant) | 28-Jun-12 | Proprietary device |
| Cc15846 | Jason's Deli | 28-Jun-12 | Bioretention |
| Cc14853 | Oakmont Elementary School | 06-Jul-12 | Dry detention basin |
| Cc15154 | Priv. storm Ohio Dom. Univ. parking lot expansion | 06-Jul-12 | Proprietary device |
| cc15261 | Ohio Dominican University Student Center | 06-Jul-12 | Dry detention basin |
| cc15351 | Airport Shuttle Bus Administrative Facility | 11-Jul-12 | Dry detention basin |
| cc14937 | 5165-5199WarnerRd. /(Falco Smith Kelley) | 11-Jul-12 | Dry detention swale |
| Cc15346 | Tutor Time Learning Centers | 11-Jul-12 | Proprietary device |
| cc15859 | Cypress Wesleyan Church Parking Expansion | 12-Jul-12 | Dry detention basin |
| cc15063 | Aldi Inc. | 12-Jul-12 | Proprietary device |
| Cc15315 | O'Reilly Auto Parts \#5 | 12-Jul-12 | Dry detention basin |

City of Columbus 2012 Post Construction BMP Inspection Summary

| Plan No | Plan Title/Name | Columbus WQ Inspection Date | WQ BMPs |
| :---: | :---: | :---: | :---: |
| cc15950 | Ohio Mulch | 15-Aug-12 | Dry detention basin |
| cc15697 | Commons at Livingston | 22-Aug-12 | Bioretention (4) |
| cc15425 | Guru Nanak Rel. Soc.(/was Gio Consulting, Inc.) | 23-Aug-12 | Dry detention basin |
| cc15967 | Goo Goo Carwash | 30-Aug-12 | Dry detention swale |
| cc15115 | The Lakes at Polaris | 30-Aug-12 | Wet detention basins (2) \& Dry detentin basin (1) |
| Cc15892 | Microhand Surgery Center | 30-Aug-12 | Dry detention basin |
| cc14762 | Waggoner Road Retail Center | 19-Sep-12 | Proprietary devices (2) |
| cc15291 | Central Ohio Transformation Center | 19-Sep-12 | Dry detention basins (2), Proprietary device, \& Dry detention swale |
| cc14789 | Broadstone Condos (was Broad Street Villas) | 19-Sep-12 | Wet detention basin |
| cc15210 | Franklin County Courthouse | 24-Sep-12 | Proprietary devices (2) |
| cc15464 | COTA Field Avenue Facility Renovation | 25-Sep-12 | Proprietary device, Bioretention \& Other |
| cc15677 | The Flats on Vine (previously Arena District Dev.) | 25-Sep-12 | Others (2) |
| cc15381 | Jefferson Avenue Apartments | 27-Sep-12 | Proprietary device |
| cc14234 | CARR Supply | 11-Oct-12 | Dry detention swale |
| cc16020 | Aveda Parking Lot Renovation | 11-Oct-12 | Proprietary device |
| cc15326 | Urban Active-Graceland Shopping Center | 15-Oct-12 | Dry detention basins (2) |
| cc15927 | Speedway | 01-Nov-12 | Dry detention basin |
| cc15082 | Fairfield Inn \& Suites | 05-Nov-12 | Dry detention basin |
| cc15805 | Capital Park Family Health Center | 06-Nov-12 | Bioretention |
| cc15375 | Columbus Police Heliport | 06-Dec-12 | Wet detention basin |

## City of Columbus 2012 Operation and Maintenance Facilities

| Tier I City Facilities - Sites subject to 40 CFR$122.26(b)(14)$ |  |
| :---: | :---: |
| Facility Location | Ohio EPA Facility Permit No. |
| Refuse <br> Alum Creek Site 2100 Alum Creek Dr. Columbus, OH 43207 | 4GR00390*EG |
| Refuse Georgesville Site 1550 Georgesville Rd. Columbus, OH 43228 | 4GR00550*EG |
| Refuse <br> Morse Road Site 4260 Morse Rd. <br> Columbus, OH 43230 | 4GR00549*EG |
| McKinley Ave. Site Located adjacent to quarry, south of Trabue, west of McKinley Ave. | February 2007 "Project Approach for the McKinley Avenue Site" submitted to Ohio EPA for approval. Ohio EPA review is pending. |
| Southerly Wastewater Treatment Plant 6977 S. High St., Lockbourne, OH 43137 | 4GR00607*DG |
| Jackson Pike Wastewater Treatment Plant 2104 Jackson Pike, Columbus, OH 43223 | 4GR00606*DG |
| Compost Facility 7000 Jackson Pike, Lockbourne, OH 43137 | 4GR00644*DG |
| Frank Road Landfill 2104 Jackson Pike, Columbus, OH 43223 | This site is a landfill that is in "closed" status with no ongoing operations. |
| Fisher Road Landfill <br> Southwest corner of I-70 and I <br> 270,north of Fisher Road <br> Columbus, OH | This site is a landfill that is in "closed" status with no ongoing operations. |

## City of Columbus <br> 2012 Operation and Maintenance Facilities

| Tier II City Facilities <br> Sites to develop P2 Practices per MS4 Permit |  |
| :---: | :---: |
| Facilities Management 640 West Nationwide Blvd. Columbus, OH 43215 | Fire Station 2 and 3 150 East Fulton St. Columbus, OH 43215 |
| Fleet Management Main Maintenance Facility 4211 Groves Road Columbus, OH 43232 | Fire Station 4 3030 Winchester Pike Columbus, OH 43232 |
| Big Run Parks Maintenance Zone 4201 Clime Rd. <br> Columbus, OH 43228 | Fire Station 5 <br> 211 McNaughten <br> Columbus, OH 43213 |
| Big Walnut Parks Maintenance Zone 5000 E Livingston Ave. Columbus, OH 43227 | Fire Station 6 5750 Maple Canyon Ave. Columbus, OH 43229 |
| The Creeks/Berliner Parks Maintenance Zone 3491 Watkins Rd. Columbus, OH 43207 | Fire Station 7 1425 Indianola Ave. Columbus, OH 43201 |
| Downtown Parks Maintenance Zone 1220 Deckenbach Columbus, OH 43223 | Fire Station 8 1240 East Long St. Columbus, OH 43201 |
| Gowdy Parks Maintenance Facility 711 W. 3rd Ave. <br> Columbus, OH 43212 | Fire Station 10 1096 West Broad St. Columbus, OH 43222 |
| Linden Parks Maintenance Zone 2071 Parkwood Ave. <br> Columbus, OH 43211 | Fire Station 11 2160 West Case Rd. Columbus, OH 43235 |
| Northeast Parks Maintenance Zone 3900 Westerville Rd. <br> Columbus, OH 43224 | Fire Station 12 3200 Sullivant Ave. Columbus, OH 43204 |
| Whetstone Parks Maintenance Zone 4015 Olentangy Blvd. <br> Columbus, OH 43214 | Station 13 <br> 309 Arcadia Ave. <br> Columbus, OH 43202 |
| Municipal Nursery 6993 S. High St. Columbus, OH 43137 | Fire Station 14 1514 Parsons Ave. Columbus, OH 43207 |
| Forestry Maintenance/ Building Maintenance 1533 Alum Industrial Dr., West | Fire Station 15 1800 Livingston Ave. Columbus, OH 43205 |
| Forestry Woodchip Operations 2100 Alum Creek Drive Columbus, OH 43207 | Fire Station 16 1130 East Weber Rd. Columbus, OH 43211 |

## City of Columbus 2012 Operation and Maintenance Facilities

| Tier II City Facilities <br> Sites to develop P2 Practices per MS4 Permit |  |
| :---: | :---: |
| Airport Golf Course 900 N. Hamilton Rd. Columbus, OH 43219 | Fire Station 17 2250 West Broad St. Columbus, OH 43204 |
| Mentel Memorial Golf Course 2055 Norton Road <br> Galloway, OH 43119 | Fire Station 18 1628 Cleveland Ave. Columbus, OH 43211 |
| Champions Golf Course 3900 Westerville Road Columbus, OH 43224 | Fire Station 19 3601 North High St. <br> Columbus, OH 43214 |
| Raymond Memorial Golf Course 3860 Trabue Road Columbus, OH 43228 | Fire Station 20 2646 East Fifth Ave. Columbus, OH 43219 |
| Turnberry Golf Course 7789 Tussing Road Columbus, OH 43068 | Fire Station 21 3294 East Main St. Columbus, OH 43213 |
| Walnut Hill Golf Course 6001 E. Livingston Ave. Columbus, OH 43227 | Fire Station 22 3069 Parsons Ave. Columbus, OH 43207 |
| Transportation Main Yard 1850 E 25th Ave. <br> Columbus, OH 43219 | Fire Station 23 4451 East Livingston Ave. Columbus, OH 43227 |
| Traffic Engineering Facility 1820 E. 17th. Ave. <br> Columbus, OH 43219 | Fire Station 24 1585 Morse Rd. <br> Columbus, OH 43229 |
| Transportation Central Outpost 650 Nationwide Blyd. <br> Columbus, OH 43215 | Fire Station 25 739 West Third Ave. Columbus, OH 43212 |
| Transportation Marion Road Outpost 2260 Lockbourne Rd. <br> Columbus, OH 43207 | Fire Station 26 5333 Fisher Rd. Columbus, OH 43228 |
| Transportation Roberts Road Outpost 4380 Currency Dr. <br> Columbus, OH 43228 | Fire Station 27 7560 Smoky Row Rd. Columbus, OH 43065 |
| Transportation North Outpost 500 Scherers Court <br> Columbus, OH 43085 | Fire Station 28 $3240 \mathrm{McCutcheon} \mathrm{Rd}$. Columbus, OH 43219 |
| Sewer Maintenance Operations Center 1250 Fairwood Avenue Columbus OH 43206 | Fire Station 29 5151 Little Turtle Way Columbus, OH 43082 |
| Grit Pad Facility 1388 Emig Road Columbus, Ohio 43223 | Fire Station 30 3555 Fishinger Rd. <br> Columbus, OH 43206 |

City of Columbus

## 2012 Operation and Maintenance Facilities

| Tier II City Facilities <br> Sites to develop P2 Practices per MS4 Permit |  |
| :---: | :---: |
| Facilities@910 Dublin Road 910 Dublin Road <br> Columbus, OH 43215 | Fire Station 31 5105 Alkire Rd. Columbus, OH 43228 |
| Dublin Road Water Treatment Plant 940 Dublin Road Cols., OH 43215 | Fire Station 32 3679 Gender Rd. <br> Columbus, OH 43110 |
| Hap Cremean Water Treatment Plant 4250 Morse Road <br> Columbus., OH 43230 | Fire Station 33 440 Lazelle Rd. <br> Columbus, OH 43081 |
| Parsons Avenue Water Treatment Plant 5600 Parsons Avenue <br> Lockbourne, OH 43137 | Fire Station 34 5210 Wilcox Rd. Columbus, OH 43016 |
| Division of Power and Water 3500 Indianola Avenue <br> Columbus, OH 43214 | Fire Training 3639 Parson Ave. Columbus, OH 43207 |
| Division of Power and Water 3568 Indianola Avenue Columbus, OH 43214 | Police Helipad 2130 West Broad St. Columbus, OH 43223 |
| Watershed Management Hoover Reservoir 7600 Sunbury Road, Westerville, OH 43081 | Police Mounted Unit 2609 McKinley Ave. Columbus, OH 43204 |
| Watershed Management <br> Griggs Reservoir <br> 3155 Riverside Drive <br> Columbus, OH 43221 | Police Firing Range 2609 McKinley Ave. Columbus, OH 43204 |
| Watershed Management Bellpointe Facility 4544 State Route 257 South Ostrander, Ohio 43061 | Police Impound Lot 2700 Impound Lot Road Columbus, OH 43207 |
| Fire Station 1 and 9 300 North Fourth St. Columbus, OH 43215 |  |

# City of Columbus <br> Street Sweeper Inventory 

December 31, 2012

| Brass Tag | Make | Model | Type |
| :---: | :--- | :--- | :--- |
| 23520 | Elgin Eagle (PM-10) | 4-Wheel sweeper | Mechanical |
| 23521 | Elgin Eagle (PM-10) | 4-Wheel sweeper | Mechanical |
| 24367 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24368 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24369 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24606 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24607 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24608 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24609 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24642 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24643 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24650 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24654 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24655 | Elgin Pelican | 3-Wheel Sweeper | Mechanical |
| 24806 | Elgin Eagle | 4-Wheel sweeper | Mechanical |
| 24623 | Elgin Eagle | 4-Wheel sweeper | Mechanical |
| 24649 | Elgin Eagle | 4-Wheel sweeper | Mechanical |
| 24667 | Elgin Eagle | 4-Wheel sweeper | Mechanical |
| 24706 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |
| 24707 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |
| 24708 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |
| 24709 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |
| 24710 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |
| 24711 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |
| 24712 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |
| 24713 | Challenger (PM-10) | 4-Wheel sweeper | Mechanical |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :--- | :--- | :--- | :--- |
| 1 Drive-Line | 1369 Frank Rd | Columbus |  |
| A \& E Metal Cutting Service | 3900 Fisher Rd Suite D2 | Columbus |  |
| A D L Technology | 2727 Scioto Parkway | Columbus |  |
| Abbott Laboratories-Pump Service Center | 1033 Kingsmill Pkwy | Columbus |  |
| ABECO Materials | 611 Marion Rd | Columbus |  |
| ABF Freight System Inc | 1720 Joyce Ave | Columbus |  |
| ABITEC Corporation | 501 W First Ave | Columbus |  |
| Able Industries Inc | 870 N 20th St | Columbus |  |
| Able Pallet Manufacturing \& Repair | 1271 Harmon Ave | Columbus |  |
| Able Printing Co | 1325 Holly Ave | Columbus |  |
| Accurate Manufacturing Co Inc | 1940 Lone Eagle St | Columbus |  |
| Accuscan Instruments Inc | 5098 Trabue Rd | Columbus |  |
| Acme Taxi | 115 E Fifth Ave | Columbus |  |
| Acrodyne Mfg Co | 41 Kingston Ave | Columbus |  |
| Action Group Inc | 411 Reynoldsburg New Albany Rd N | Columbus |  |
| Action Printing \& Signs / Raile Printing Services Co dba | 2731 E Fifth Ave | Columbus |  |
| A-Display Service Corp | 541 Dana Ave | Columbus |  |
| Advance Printing \& Graphics | 1349 Delashmut Ave | Columbus |  |
| Advance Sign Group Inc | 834 W 3rd Ave | Columbus |  |
| Advanced Fuel Systems Inc | 841 Alton Ave Ste B |  |  |
| AFP | 2200 International St | Columbus |  |
| AHMF Inc | 2245 Wilson Rd | Columbus |  |
| AIN Plastics | 1360 Boltonfield St | Columbus |  |
| Ajax Industries Inc | 575 N Hague Ave | Columbus |  |
| All A Cart Manufacturing Inc | 1450 Universal Rd | Columbus |  |
| All City Auto Wrecking Inc | 1441 Joyce Ave | Columbus |  |
| All Foreign Used Auto Parts Inc | 500 N WILSON RD | Columbus |  |
| All Pack Incorporated | 1709 Dividend Dr | Columbus |  |
| All Star Sign Co | 112 S Glenwood Ave | Columbus |  |
| Allen Press Printers Inc | 492 E Mound St |  |  |
| Alliance Data Systems Corp | 6939 Americana Parkway Dr |  |  |
|  |  |  |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Allied Custom Molded Products | 1240 Essex Ave | Columbus | ImspectionDate2012 05 |
| Allied Fabricating \& Welding | 5699 Chantry Dr | Columbus |  |
| Allied Sign Co | 818 Marion Rd | Columbus |  |
| All-State Industries Inc | 3890 Twin Creeks Dr | Columbus |  |
| ALO Ohio | 623 E 11th Ave | Columbus |  |
| Alro Steel Corp | 555 Hilliard Rome Rd | Columbus |  |
| Amcol International Corp | 2211 Parsons Ave | Columbus |  |
| American Asset Recovery LLC | 672 Harrison Dr | Columbus |  |
| American Colorscans Inc | 5178 Sinclair Rd Ste A | Columbus |  |
| American Corrugated Products | 4700 Alkire Rd | Columbus |  |
| American Glass Services LLC | 921 N 22nd St | Columbus |  |
| American Isostatic Presses Inc | 1205 S Columbus Airport Rd | Columbus |  |
| American Kenda Rubber Industrial Co | 7095 Americana Parkway Dr | Columbus |  |
| American LedGible Inc | 1776 Lone Eagle St | Columbus |  |
| American Limousine Service | 1251 Alum Creek Dr | Columbus |  |
| American Orthopedics Inc | 1151 W 5th Ave | Columbus |  |
| Amerisource Health SVC | 2550 John Glenn Ave \#A | Columbus |  |
| Amtekco Industries Inc | 1205 Refugee Rd | Columbus |  |
| Anateca/Polycel LLC | 1633 Woodland Ave | Columbus |  |
| Anderson Aluminum Corp | 2816 Morse Rd | Columbus |  |
| Anderson-Clark Inc | 2700 McKinley Ave | Columbus |  |
| Andrews Moving And Storage | 2500 Charter St | Columbus |  |
| Anthony Thomas Candy Co Inc | 1777 Arlingate Ln | Columbus | P11/7/2012 |
| Aqua Science Inc | 1601 Woodland Ave | Columbus |  |
| Arch Deco Glass | 2395 Setterlin Dr | Columbus |  |
| Arch Express Transportation | 1637 E Livingston Ave | Columbus |  |
| Arrow Concrete Co | 816 McKinley Ave | Columbus |  |
| Arrow Concrete Co | 3551 E Fifth Ave | Columbus |  |
| Art Brands LLC | 225 Business Center Dr | Columbus |  |
| Assembly Machining \& Wire Pots | 2375 Refugee Park | Columbus |  |
| Atco Printing Co | 1184 W Broad St | Columbus |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :--- | :--- | :--- | :--- |
| Atlapac Corp | Columbus |  |  |
| Atlas Blueprint \& Supply Co Inc | 374 W 4th Ave Spring St | Columbus |  |
| Auddinos Italian Bakery Inc | 1490 Clara Ave | Columbus |  |
| Auld Company, The | 180 Outerbelt St | Columbus |  |
| Auld Company, The | 137 Outerbelt St | Columbus |  |
| Avidyne Safety Systems Group | 4800 Evanswood Dr | Columbus |  |
| B \& G Tool Co | 4832 Kenny Rd | Columbus |  |
| Baise Quality Printing | 695 Koebel Ave Frnt | Columbus |  |
| Ball Corp | 2690 Charter St | Columbus |  |
| Banner Stamping Co | 1308 Holly Ave | Columbus |  |
| Bartha | 600 N Cassady Ave | Columbus |  |
| Bartley, Offie | 3760 E 5th Ave | Columbus |  |
| BB Bradley Co Inc | 2699 Scioto Pkwy | Columbus |  |
| BB Plastics Recycling | 1360 Norton Road | Columbus |  |
| Beaumont Metal Works, Inc | 1473 Showcase Drive | Columbus |  |
| Beck \& Orr Inc | 3097 W Broad St | Columbus |  |
| Beckenhorst Press Inc | 960 Old Henderson Rd | Columbus |  |
| Benchmark Architectural Systems | 700 Marion Rd | Columbus |  |
| Berger Transfer \& Storage Inc | 1111 Milepost Dr | Columbus |  |
| Best Supply Inc | 1885 OBrien Rd | Columbus |  |
| Bexley Pen Co Inc | 2840 Fisher Rd \# B | Columbus |  |
| BH Thermal Corp | 1055 Gibbard Ave | Columbus |  |
| Bioflex Inc | 3055 Templeton Rd | Columbus |  |
| Blacco Splicing \& Rigging Loft | 1976 Alum Creek Dr | Columbus |  |
| Blackburn's Fabrication Inc | 2467 Jackson Pike | Columbus |  |
| Blade Manufacturing Co, The | 909 W Third Ave | Columbus |  |
| BlockAmerica Corp | 750 Kaderly | Columbus |  |
| Blue Chip Manufacturing \& Sls | 3155 Lamb Ave | Columbus |  |
| Blue Line Distributing | 2250 Spiegel Dr Suite P | Columbus |  |
| Bo Mic Enterprises Inc | 715 Marion Rd | Columbus |  |
| BOC Gases | 1699 Feddern Ave |  |  |
|  |  |  |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Boehm Inc | 2050 Hardy Parkway St | Columbus |  |
| Boehm Machine Co Inc | 1297 N Memory Ln | Columbus |  |
| Boggs \& Associates Inc | 3555 E Fulton St | Columbus |  |
| Bolt N Lock Mini Storage | 1162 Norton Rd | Columbus |  |
| Bonded Chemicals Inc | 2645 Charter St | Columbus |  |
| Bowman Industries Inc | 857 King Ave | Columbus |  |
| Brunk Transportation | 2001 Circle Dr | Columbus |  |
| Brunk Transportation Inc | 4692 Kenny Rd | Columbus |  |
| Buckeye Auto Parts of Columbus Inc | 2474 McKinley Ave | Columbus |  |
| Buckeye Boxes Inc | 601 N Hague Ave | Columbus |  |
| Buckeye Boxes Warehouse | 665 N Hague Ave | Columbus |  |
| Buckeye Metal Works Inc | 3240 Petzinger Rd | Columbus |  |
| Buckeye Recycling Center | 3483 Fulton St | Columbus |  |
| Budget Storage | 3376 Refugee Rd | Columbus |  |
| Builders Trash Service | 1575 Harmon Ave | Columbus |  |
| Bus Services Inc | 3153 Lamb Ave | Columbus |  |
| C \& R Inc | 2550 Creekway Dr | Columbus |  |
| Cabbage Cases Inc | 1166 Steelwood Rd \#C | Columbus |  |
| Cabot Industries | 1727 Georgesville Rd | Columbus |  |
| Campus Printing | 2415 N High St | Columbus |  |
| Cap \& Associates Inc | 445 McCormick Blvd | Columbus |  |
| Capital Awards Inc | 5211 N High St | Columbus |  |
| Capital Brass Foundry LLC | 91 Kingston Ave | Columbus |  |
| Capital City Reload | 1089 Joyce Ave | Columbus |  |
| Capital Die Tool Machine | 1055 Dearborn Dr | Columbus |  |
| Capitol IndustriesInc | 900 N 20th Street | Columbus |  |
| Car Go Self Storage | 3613 Refugee Rd | Columbus |  |
| Car Go Self Storage | 3935 Westerville Rd | Columbus |  |
| Car Go Self Storage | 490 N Hamilton Rd | Columbus |  |
| Cardinal Container Corp | 3700 Lockbourne Rd | Columbus |  |
| Cardinal Imaging Inc | 3511 Johnny Appleseed Ct | Columbus |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Cardinal Transportation Ltd | 2845 Fisher Rd | Columbus |  |
| Carolyn Chemical Company | 1601 Woodland Ave | Columbus |  |
| Carpet Arts Unlimited | 2062 Integrity Dr S | Columbus |  |
| Casino Self Storage | 3300 W Broad St | Columbus |  |
| Casino Self Storage | 480 Exchange Dr | Columbus |  |
| Cast Stone Co Inc | 45 W Barthman Ave | Columbus |  |
| C-B Beverage Corp | 760 Harmon Ave | Columbus |  |
| Cello-Poly | 4041 Roberts Rd | Columbus |  |
| Central Ohio Contractors Inc | 900 Frank Rd | Columbus |  |
| Central Ohio Contractors Inc | 2879 Jackson Pike | Columbus |  |
| Central Ohio Graphics Inc | 1020 W 5th Ave | Columbus |  |
| Central Ready Mix of Ohio LLC | 4252 Truro Station Rd | Columbus | - |
| Central Ready Mix of Ohio LLC | 569 N Wilson Rd | Columbus |  |
| Certified Oil Inc | 949 King Ave | Columbus |  |
| CEVA LOGISTICS | 2727 London Groveport Rd | Columbus |  |
| Charisma Products Inc | 726 E Lincoln Ave | Columbus |  |
| Chester A Smith Inc | 1330 Norton Ave | Columbus |  |
| Cincinnati Container Co Inc | 6736 Commerce Court Dr | Columbus |  |
| Cintas Document Management | 2500 Charter St | Columbus |  |
| Cintas Document Management | 2612 Walcutt Rd | Columbus |  |
| Clark Graphics, Inc. | 1550 N Wilson Rd | Columbus |  |
| Clinical Specialties Inc | 6361 Nicholas Dr | Columbus |  |
| CM Media Inc | 5253 Sinclair Rd | Columbus |  |
| Coca-Cola Co | 2455 Watkins Rd | Columbus | P11/7/2012 |
| Columbus Auto Recycling | 860 Marion Road | Columbus |  |
| Columbus Auto Shredding | 2181 Alum Creek Dr | Columbus |  |
| Columbus Bituminous | 370 Morrison Rd | Columbus |  |
| Columbus Brewing Company | 525 Short St | Columbus |  |
| Columbus Bride | 5255 Sinclair Rd | Columbus |  |
| Columbus Col-Weld Corp | 1515 Harrisburg Pike | Columbus |  |
| Columbus Controls, Inc. | 3573 Johnny Appleseed Ct | Columbus |  |

2012 Categoty 1

## Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Columbus Envelope Co Inc | 3303 E 11th Ave | Columbus |  |
| Columbus Gasket Co Inc | 1875 Lone Eagle St | Columbus |  |
| Columbus Glass Block | 3091 E 14th Ave | Columbus |  |
| Columbus Green Cabs | 1989 Camaro Ave | Columbus |  |
| Columbus Machine Works LLC | 2491 Fairwood Ave Ste 200 | Columbus |  |
| Columbus Marble Products Inc | 808 Rhoads Ave | Columbus |  |
| Columbus Micro System Inc | 5087 Westerville Rd | Columbus |  |
| Columbus OH Limo Service | 2999 Switzer Ave | Columbus |  |
| Columbus Ohio Limousine Services | 454 Wheatland Ave | Columbus |  |
| Columbus Oil Co | 1812 McKinley Ave | Columbus |  |
| Columbus Pallet Recycling | 611 Marion Rd | Columbus |  |
| Columbus Paperbox Co Inc | 595 Van Buren Dr | Columbus |  |
| Columbus Sign Co | 1515 E 5th Ave | Columbus |  |
| Columbus Stone Center | 1736 McKinley Ave | Columbus |  |
| Columbus Technical Services | 5763 Westbourne Dr | Columbus |  |
| Columbus Tops \& Case Goods | 3022 E 14th Ave | Columbus |  |
| Columbus Transportation and Tours | 2999 Switzer Ave | Columbus |  |
| Columbus Truck Equipment Company | 1688 E Fifth Ave | Columbus |  |
| Columbus Wood Products LLC | 1800 E 5th Ave | Columbus |  |
| Colvin Gravel Co Inc | 2290 McKinley Ave | Columbus |  |
| Commercial Movers Inc | 1299 Boltonfield St | Columbus |  |
| Community Bus Service | 1160 Alum Creek Dr | Columbus |  |
| Complete Resources | Truro Station Rd | Columbus |  |
| Concept 9 Inc | 1604 Clara Ave | Columbus |  |
| Conn's Potato Chip Co Inc | 1271 Alum Creek Dr | Columbus |  |
| Containerport Group Inc | 2400 Creekway Dr | Columbus |  |
| Corporate Cutting Dies LLC | 1919 S 6th St | Columbus |  |
| Cox Brothers Inc | 1467 Weldon Ave | Columbus |  |
| Cozmyk Enterprises, Inc. | 3757 Courtright Ct | Columbus |  |
| Cranel Inc | 8999 Gemini Pkwy | Columbus |  |
| Croswell VIP Motorcoach Services | 1640 E Fifth Ave | Columbus |  |

## 2012 Categoty 1

## Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Cumberlander Rubbish Removal | 1972 S Champion Ave | Columbus |  |
| CycleMet Inc Recycling Center | 2405 Harrison Rd | Columbus |  |
| D P Miller Trucking Inc | 1330 McKinley Ave | Columbus |  |
| Daifuku America Corp | 6700 Tussing Rd | Columbus |  |
| Dale W Beavers Epal | 2651 Johnstown Rd | Columbus |  |
| D'AMICO Petroleum Inc | 380 Exchange Dr | Columbus |  |
| Daniel Logistics | 426 McCormick Blvd | Columbus |  |
| Danlor Inc | 2155 Dublin Rd | Columbus |  |
| DC | 2525 Rohr Rd Suite A | Columbus |  |
| Dean Engraving Co | 1876 S 4th St | Columbus |  |
| Decorative \& Coating Systems | 1400 Ohlen Ave | Columbus |  |
| Dee Printing Inc | 4999 Transamerica Dr | Columbus |  |
| Defabco Inc | 3765 E Livingston Ave | Columbus |  |
| Dell Fixtures Inc | 321 Dering Ave | Columbus |  |
| Desired Effect Contemporary Furniture | 1846 Federal Parkway | Columbus |  |
| DHL Airborne Logistics Services | 2400 Spiegel Dr | Columbus |  |
| DHL Express | 2250 International St | Columbus |  |
| DHL Global Forwarding | 2144 John Glenn Ave Suite A | Columbus |  |
| Diamond Logistics Inc | 745 N Wilson Rd | Columbus |  |
| Dick Medical Supply | 630 Marion Rd | Columbus |  |
| Distinctive Surfaces, Inc. | 5158 Sinclair Rd | Columbus |  |
| DMI Metals Inc | 1465 E 17th Ave | Columbus |  |
| Dura-Belt, Inc. | 3119 Scioto Darby Executive Ct | Columbus |  |
| Dura-Belt, Inc. | 2909 Scioto Darby Executive Ct | Columbus |  |
| Dynamex Operations East Inc | 2475 Scioto Harper Dr | Columbus |  |
| E Taylor Transportation Sves | 4274 Groves Rd | Columbus |  |
| Edwards Steel | 1777 McKinley Ave | Columbus | P7/2/2012 |
| EE Ward Moving | 1975 Galaxie St | Columbus |  |
| EEI Computer Services | 1249 Essex Ave | Columbus |  |
| EFCO Corp | 3900 Zane Trace Dr | Columbus |  |
| Electronic Security Services | 3573 Refugee Rd | Columbus |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Emax Inc | 2701 Indianola Ave | Columbus |  |
| Engineered Marble Inc | 4064 Fisher Rd | Columbus |  |
| Englefield \& Associates Inc | 6344 Nicholas Dr | Columbus |  |
| Etc Cornerstone Express Ptg | 6107 McNaughten Ctr | Columbus |  |
| Evans Adhesive Corp Ltd | 925 Old Henderson Rd | Columbus | P8/29/2012 |
| Evdon Corp DBA Wasem Packaging | 2591 Harrison Rd | Columbus |  |
| EXCEL | 4200 Westward Ave | Columbus |  |
| Excel Direct Inc | 1621 Georgesville Rd | Columbus |  |
| Ex-Cel Manufacturing | 1819 Walcutt Rd | Columbus |  |
| Excelsior Printing Co | 2000 Parsons Ave | Columbus |  |
| Exel Inc | 2700/4700 Securities St | Columbus |  |
| Exhibitpro Inc | 9075 Antares Ave | Columbus |  |
| Extended Resources LLC | 4670 Groves Rd | Columbus |  |
| Farber Specialty Vehicles, Inc. | 7052 Americana Parkway Dr | Columbus |  |
| Fastsigns | 1744 Rome Hilliard Rd | Columbus |  |
| Fastsigns | 205 E Broad St | Columbus |  |
| FEDEX EXPRESS-CMHA | 2850 International St | Columbus |  |
| FedEx Kinkos | 4516 Kenny Rd | Columbus |  |
| FedEx Kinkos | 8733 Sancus Blvd | Columbus |  |
| FedEx Kinkos | 5800 Frantz Rd | Columbus |  |
| FedEx Kinko's Office \& Print Center | 2668 Brice Rd | Columbus |  |
| Fellers Inc | 3777 Business Park Dr Ste D | Columbus |  |
| Fetters \& Son Sign Co | 1593 Shawnee Ave | Columbus |  |
| Fifth Ave Fret Shop LLC | 1597 W 5th Ave | Columbus |  |
| Figures Packaging Co | 3585 E Fulton St | Columbus |  |
| First Transit Inc | 1333 Fields Ave | Columbus |  |
| Flag Lady's Flag Store, The | 4567 N High St | Columbus |  |
| Fortin Welding \& Mfg Inc | 1132 W Third Ave | Columbus |  |
| Fortin Welding \& Mfg Inc. | 944 W Fifth Ave | Columbus |  |
| Four O Corporation | 2181 Hardy Parkway St | Columbus |  |
| Fournier Rubber \& Supply Co. | 1341 Norton Ave | Columbus |  |

## 2012 Categoty 1

## Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Fred D Pfening Co The | 1075 W 5th Ave | Columbus |  |
| Fred D Pfening Co The | 1372 Oxley Rd | Columbus |  |
| FST Logistics | 5400 Renner Rd | Columbus |  |
| Fst Logistics Inc | 700 Harrison Dr | Columubs |  |
| FUNAI Service Corporation | 2200 Spiegel Dr | Columbus |  |
| G2 Print Plus | 3787 Interchange Rd | Columbus |  |
| GC Pallet | 185 N Yale Ave | Columbus |  |
| Generals Books Blue \& Gray Magazine | 522 Norton Rd | Columbus |  |
| Georgia-Pacific Chemicals LLC | 1975 Watkins Rd | Columbus | P8/9/2012 |
| GL Transportation | 2150 Cloverleaf St | Columbus |  |
| Glass Axis | 1341 Nortan Ave \#B | Columbus |  |
| Global Recycling Inc | 1465 E 17th Ave | Columbus |  |
| Goodale Auto-Truck Parts Co | 1100 E 5th Ave | Columbus |  |
| Graffiti Foods | 333 Outerbelt St | Columbus |  |
| Grandon Mfg Co Inc | 530 Dow Ave | Columbus |  |
| Green Line Trucking Inc | 1050 E Fifth Ave | Columbus |  |
| Guardtower Inc | 3600 Trabue Rd | Columbus |  |
| H \& E Machine Co | 1646 Fairwood Ave | Columbus |  |
| H \& L Industries Inc | 2500 Creekway Dr | Columbus |  |
| Hagglunds Drives, Inc. | 2275 International St | Columbus |  |
| Hallmark Graphics Inc | 3559 E Fulton St | Columbus |  |
| Halloms Salvage | 1701 Harrisburg Pike | Columbus |  |
| Hamilton Parker Ltd | 1865 Leonard Ave | Columbus |  |
| Hanover Signs Inc | 1771 Progress Ave | Columbus |  |
| Harper Engraving \& Printing Co | 2626 Fisher Rd | Columbus |  |
| Harrop Industries, Inc. | 3470 E 5th Ave | Columbus |  |
| Hartig Industries Inc | 682 E Lincoln Ave | Columbus |  |
| Hathaway \& Ferguson Inc | 873 Mount Vernon Ave | Columbus |  |
| Hazelbaker Industries Ltd | 1355 McKinley Ave | Columbus |  |
| Heartland Express Inc | 1800 Lone Eagle St | Columbus |  |
| Heidelberg Distribution | 3801 Parkwest Dr | Columbus |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Hem Auto Parts Inc | 1559 McKinley Ave | Columbus |  |
| Hi-Lite Plastic Products | 3760 E 5th Ave | Columbus |  |
| Hilltop Transportation Inc | 805 Cleveland Ave | Columbus |  |
| Hite Parts Exchange Inc | 2235 McKinley Ave | Columbus |  |
| Hittle House | 774 Internet Dr | Columbus |  |
| Home Moving Storage Co | 2066 Integrity Drive N | Columbus |  |
| Howard Industries Inc | 1840 Progress Ave | Columbus |  |
| Hudson Meat Co. | 2320 S 7th St | Columbus |  |
| Hydron Inc | 2550 W 5th Ave | Columbus |  |
| Hytec Automotive | 4419 Equity Dr | Columbus |  |
| 1 A B F Inc | 1890 McKinley Ave | Columbus |  |
| I H Schlezinger Inc | 2040 S Parsons Ave | Columbus |  |
| Identification Systems Inc | 1396 King Ave | Columbus |  |
| IFCO Systems | 1399 Stimmel Rd | Columbus |  |
| iLevel by Weyerhaeuser Co | 6460 Busch Blvd Ste 200 | Columbus |  |
| Image Print Inc | 6417 Busch Blvd | Columbus |  |
| Imagineering of Ohio Inc | 723 Taylor Ave | Columbus |  |
| Industrial Pattern \& Mfg Co | 899 N 20th St | Columbus |  |
| Industrial Solutions Inc | 9120 Antares Ave | Columbus |  |
| Interior Dunnage Specialties | 470 E Starr Ave | Columbus |  |
| Interline Brands Inc / Wilmar | 2375 International St | Columbus |  |
| Interstate Cold Storage II | 2400 Setterlin Dr | Columbus |  |
| Interstate Cold Storage Inc | 4350 Roberts Rd | Columbus |  |
| Iron Mountain | 5057 Freeway Dr E | Columbus |  |
| Isco Inc / Amerine Development Company LLC | 6360 Fiesta Dr | Columbus |  |
| ISP Chemicals Inc | 1979 Atlas St | Columbus | P9/26/2012 |
| J \& R Schugel Trucking Inc | 440 Exchange Dr | Columbus |  |
| J E Johnson Pallett Inc | 1465 E 17th Ave | Columbus |  |
| J W Groves \& Sons Inc | 1812 McKinley Ave | Columbus |  |
| JAG Graphics Ltd | 2727 Harrison Rd | Columbus |  |
| James A Eastwood / Machine Arts Company | 663 Harmon Plaza | Columbus |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Jax Wax Inc | 3150 Lamb Ave | Columbus |  |
| Jet Container Co | 2050 S High St | Columbus |  |
| Jim Cruse Neon Signs | 3057 E 5th Ave | Columbus |  |
| Jit Co Inc | 2180 Venus Dr | Columbus |  |
| Jones Lumber \& Millwork Co. | 57 N Sylvan Ave | Columbus |  |
| Jta Graphic Paper Services Inc | 725 Harrison Dr | Columbus |  |
| Kaffenbarger Truck Equipment Co. | 2310 Refugee Rd | Columbus |  |
| Keffs Inc | 2117 S High St | Columbus |  |
| Keystone Freight | 2545 Parsons Ave | Columbus |  |
| KGR Auto Salvage | 2020 Refugee Road | Columbus |  |
| Kickplate Company | 2199 Lockbourne Rd | Columbus |  |
| Kingswood Manufacturing Co | 3065 Switzer Ave | Columbus |  |
| Kroger Company | 1500 Commodity Blvd | Columbus |  |
| Kroger Pharmacy Department | 2250 Spiegel Dr Suite M | Columbus |  |
| Kurtz Bros Central Ohio LLC | 3540 Jackson Pike | Columbus |  |
| Kurtz Bros Central Ohio LLC | 6440 S High St | Columbus |  |
| Kyron Tool \& Machine Co Inc | 494 Dow Ave | Columbus |  |
| L H Marshall Co | 270 W Lane Ave | Columbus |  |
| Lafarge North America Inc | 1801 Watkins Rd | Columbus |  |
| Lambert Sheet Metal Inc | 3776 E Fifth Ave | Columbus |  |
| Laminating Co Inc | 363 W Nationwide Blvd | Columbus |  |
| Lamit Industries Inc | 710 Marion Rd | Columbus |  |
| Landon Vault Co | 1477 Frebis Ave | Columbus |  |
| Lang Stone | 4099 E Fifth Ave | Columbus |  |
| Lang Stone Co Inc | 707 Short St | Columbus |  |
| Lavoz Hispania Newspaper | 3552 Sullivant Ave | Columbus |  |
| Lear Furukawa | 2181 International St | Columbus |  |
| Lehner Signs Inc | 2983 Switzer Ave | Columbus |  |
| Lewis \& Michael Moving | 845 Harrisburg Pike | Columbus |  |
| Limbach Company LLC | 822 Cleveland Ave | Columbus |  |
| Linde Gas LLC | 450 Greenlawn Ave | Columbus |  |

2012 Categoty 1

## Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| LKQ Triplett Auto Recyclers Inc | 6740 Commerce Court Dr | Columbus |  |
| Local Waste Services LLC | 1300 S Columbus Airport Rd | Columbus |  |
| Local Wholesale LLC | 1305 S Columbus Airport | Columbus |  |
| Lock It Storage | 371 Maier Pl | Columbus |  |
| Lucent Technologies | 6200 E Broad St | Columbus |  |
| M \& M Door Co | 1009 McKinley Ave Ste B | Columbus |  |
| M.R.S. Industrial, Inc. | 2583 Harrison Rd | Columbus |  |
| Machine Tool Rebuilders Inc | 560 W Nationwide Blyd \# 38 | Columbus |  |
| Market Day Corp | 3080 Valleyview Dr | Columbus |  |
| Mason \& Dixon Lines Inc | 2950 International St | Columbus |  |
| Mayo's Printing \& Office Sply | 1496 Mount Vernon Ave | Columbus |  |
| MBM Inc | 4300 Diplomacy Dr | Columbus |  |
| Mc Glaughlin Oil Co | 3750 E Livingston Ave | Columbus |  |
| Mc Glennon Metal Products Inc | 940 N 20TH St | Columbus |  |
| McNeil Group Inc | 1701 Woodland Ave | Columbus |  |
| Med Flight Ohio | 2827 W Dublin Granville Rd | Columbus |  |
| Mercury Machine \& MFG Co | 644 Stelzer Rd | Columbus |  |
| Metal Services Worldwide Inc | 5320 Krieger Ct | Columbus |  |
| Metro Auto | 1555 Joyce Ave | Columbus |  |
| Mettler-Toledo International | 1900 Polaris Pkwy | Columbus |  |
| Michael's Finer Meats/Seafoods | 3775 Zane Trace Dr | Columbus |  |
| Mid Ohio Golfer Association | 5255 Sinclair Rd | Columbus |  |
| Middleport Terminal (Shelly) | 500 Corr Rd | Columbus |  |
| Midwest Closets Inc | 948 Freeway Dr N BIdg 10 | Columbus |  |
| Midwest Fender | 2040 S Hamilton Rd | Columbus |  |
| Midwest Graphics Inc | 771 Dearborn Park Ln Ste D | Columbus |  |
| Mill Tech LLC | 364 Centab Dr | Columbus |  |
| Millwood Inc | 1886 Williams Rd | Columbus |  |
| Mini Storage Depot | 9984 S Old State Rd | Columbus |  |
| Mini Storage Depot | 7200 Tussing Rd | Columbus |  |
| Mini Storage Depot | 5301 Tamarack Circle East | Columbus |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :--- | :--- | :--- | :--- |
| Mini Storage Depot | 1330 Georgesville Rd | Columbus |  |
| Mobil Shop Co L L C | 5089 Westerville Rd | Columbus |  |
| Mobile Mini Inc | 871 Buckeye Park Rd | Columbus |  |
| Modlich Stoneworks | 2255 Harper Rd | Columbus |  |
| Mohawk Industries Inc | 6450 LaSalle Dr | Columbus |  |
| Mok Industries LLC | 4449 Easton Way | Columbus |  |
| Morcast Precision Inc | 1615 Woodland Ave | Columbus |  |
| Morning Star Self Storage | 3391 S High St | Columbus |  |
| Morningstar Mini Storage | 3344 Morse Rd | Columbus |  |
| MS Energy of Central Ohio Inc | 922 Freeway Dr N | Columbus |  |
| Mustang's Monte Carlo's \& More Specializing Inc | 900 Frank Rd | Columbus |  |
| Nandos Complete Auto Care | 445 Commerce Square | Columbus |  |
| National Freight Industries | 200 McCormick Blvd | Columbus |  |
| NEMF-New England Motor Freight- Excellance in Motion | 1700 Georgesville Rd | Columbus |  |
| NGL Warehouse | 1500 Commodity Blvd | Columbus |  |
| North Coast Logistics Inc | 1033 Brentnell Ave | Columbus |  |
| North Shore Stone Inc | 915 Manor Park Dr | Columbus |  |
| Northway Transportation Inc / Safe Lift Transportation | 1400 Grogan Ave | Columbus |  |
| OF A Svcs Inc | 2130 Stella Ct | Columbus |  |
| Oberfields LLC | 1165 ALUM CREEK DR (\& 1281) | Columbus |  |
| ODW Logistics Inc | 1580 Williams Rd | Columbus |  |
| Ohio Drop Off | 1600 Universal Dr | Columbus |  |
| Ohio Drop Off | 4665 Westerville Rd | Columbus |  |
| Ohio Drop Off | 4120 Roberts Rd | Columbus |  |
| Ohio Drop Off | 5380 Riverside Dr | Columbus |  |
| Ohio Electric Motor Service, LLC | 1854 S High St | Columbus |  |
| Ohio Fabrication \& Welding | 1465 Clara Ave | Columbus |  |
| Ohio Foam Corp | 1511 Alum Creek Dr | Columbus |  |
| Ohio Globe Tech LLC | 817 Phillipi Rd |  |  |
| Ohio Grinding \& Machine Co | 1282 Edgehill Rd |  |  |
| Ohio Label Inc | 5005 Transamerica Dr |  |  |
|  |  |  |  |

2012 Categoty 1

## Industry Summary

| Company | SiteAddress | City | InspectionDate 201205 |
| :---: | :---: | :---: | :---: |
| Ohio State University is on site | 2001 Polaris Pkwy | Columbus |  |
| Ohio Wire Form \& Spring Co | 2270 S High St | Columbus |  |
| Olen Corp., The | 4755 S High St | Columbus |  |
| Optical Distribution Corp | 814 W 3rd Ave | Columbus |  |
| Owl Creek Contracting Inc | 4755 S High St | Columbus |  |
| P S Plastics Inc | 2020 Britains Ln | Columbus |  |
| PAIGE ELECTRIC | 2525 Rohr Rd Suite P | Columbus |  |
| Pain Enterprises Inc | 4110 Lockbourne Rd | Columbus |  |
| Panacea Products | 2999 Silver Dr | Columbus |  |
| Parker Hannifin Corp | 3885 Gateway Blvd | Columbus |  |
| Parsons Auto Parts Inc | 2250 Parsons Ave | Columbus |  |
| Patio Room Factory | 1900 Federal Parkway | Columbus |  |
| Patrick Manufacturing | 5474 W Byers Circle | Columbus |  |
| Pearson Education Inc | 445 Hutchinson Ave Fl 4 | Columbus |  |
| Pennsylvania Lines LLC | N/W/O 1049 Joyce Ave | Columbus |  |
| Petsmart Distribution Center | 6499 Adelaide Ct | Columbus |  |
| Phoenix Recycling, Inc. | 659 Marion Rd | Columbus |  |
| Pick-n-Pull Auto Dismantlers | 2716 Groveport Rd | Columbus |  |
| Pjax Inc | 5075 Krieger Ct | Columbus |  |
| Planes Moving \& Storage | 2131 Dividend Dr | Columbus |  |
| Planes Moving \& Storage Co of | 2000 Dividend Dr | Columbus |  |
| Plaskolite Inc | 1770 Joyce Ave | Columbus |  |
| Ply-Board Fabricators Co Inc | 1284 Edgehill Rd | Columbus |  |
| Ppafco Inc | 1096 Ridge St | Columbus |  |
| Precision Polymers Inc | 6219 Americana Parkway Dr | Columbus |  |
| Premier Office Movers LLC | 2725 Westbelt Dr | Columbus |  |
| Presidential Coach | 2495 Harrison Rd | Columbus |  |
| Prestige Corporate Car | 896 King Ave | Columbus |  |
| Prime Equipment Group Inc | 2000 E FULTON ST | Columbus |  |
| Printpro Inc | 760 Busch Ct | Columbus |  |
| Prism Prints Inc | 1540 Clara Ave | Columbus |  |

## 2012 Categoty 1 <br> Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Pro Printing Inc | 3779 Sullivant Ave | Columbus |  |
| Professional Truck Washing Services | 4255 Roberts Rd | Columbus |  |
| PSC Container Services | 1291 W Mound St | Columbus |  |
| Q3 Stamped Metal | 777 Manor Park Dr | Columbus |  |
| Quality Bakery Frozen Warehouse ( T Marzetti Co) | 6660 Broughton Ave | Columbus |  |
| Quality Service Products Inc | 528 E Hudson St | Columbus |  |
| Quickprint Center | 1399 Grandview Ave | Columbus |  |
| R \& P Printing Inc | 1090 Parsons Ave | Columbus |  |
| R J M Stamping Co | 1641 Universal Rd | Columbus |  |
| Refuel Environmental Services LLC (DBA Refuel Inc) | 4280 Groves Rd | Columbus |  |
| Rex Automation Inc | 959 Schrock Rd | Columbus |  |
| Richardson Printing, Inc. | 6161 Busch Blvd, Ste 318 | Columbus |  |
| Robert Eagle Candies | 4590 N High St | Columbus |  |
| Robins Interstate Carriers | 1879 Federal Parkway | Columbus |  |
| Roof to Road | 900 Frank Rd | Columbus |  |
| Rosati Windows | 4200 Roberts Rd | Columbus |  |
| Rose Products \& Service Inc | 545 Stimmel Rd | Columbus |  |
| Round Hill Furniture of Ohio | 5357 Crosswind Drive | Columbus |  |
| Royal Paper Stock Co Inc | 1300 Norton Rd | Columbus |  |
| RPD Device Operations | 6550 Singletree Dr | Columbus |  |
| Ruby Chemical Co | 1601 Woodland Ave | Columbus |  |
| Rural Metro of Central Ohio | 280 Fletcher St | Columbus |  |
| Rutland Plastic Technologies | 777 Dearborn Park Ln Ste B | Columbus |  |
| Ryerson Inc | 555 N Yearling Rd | Columbus |  |
| Salem Manufacturing \& Sales | 2856 Banwick Rd | Columbus |  |
| Sanese Services Attn:Mike Bone | 6465 Busch Blvd | Columbus |  |
| Scarefactory Inc | 2905 E 4TH Ave | Columbus |  |
| Scholz \& Ey Engravers Inc | 1558 Parsons Ave | Columbus |  |
| Schottenstein Stores Corp. (HQ) | 1800 Moler Rd | Columbus |  |
| Scioto Ready Mix | 245 Morrison Rd | Columbus |  |
| Screen Printing Show House Inc | 853 N Nelson Rd | Columbus |  |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Sears \#911RRC | 3685 Alum Creek Dr | Columbus |  |
| Sears Logistics Unit 88420 | 4100 Lockbourne Industrial PKW | Columbus |  |
| Sears Roebuck \& Co \#88781 | 5330 Crosswind Dr | Columbus |  |
| Select Seating Group | 862 E Jenkins Ave | Columbus |  |
| Sensotec LLC | 1212 Chesapeake Ave | Columbus |  |
| Sentek Corp | 1160B Alum Creek Dr | Columbus |  |
| Shasta Beverages Inc | 3699 Alum Creek Dr | Columbus |  |
| Siam Reclaim Technologies, Inc | 3960 Groves Rd Unit B | Columbus |  |
| Sibo, Inc. | 1850 Federal Parkway | Columbus |  |
| Signage Consultants Inc | 870 E 5th Ave | Columbus |  |
| Signs USA | 3220 Valleyview Dr | Columbus |  |
| Simply Self Storage | 810 E Cooke Rd | Columbus |  |
| Simply Storage | 3171 S High St | Columbus |  |
| Sims Recycling LLC | 697 James Rd N | Columbus |  |
| Skeels Manufacturing | 4040 Fondorf Dr | Columbus |  |
| Smith Dodson Co | 200 Colton Rd | Columbus |  |
| Southland Self Storage DBA Carninal Self Storage | 5341 N Hamilton Rd | Columbus |  |
| Southwood Self Storage | 711 Southwood Ave | Columbus |  |
| Space Savers Mini Storage | 5660 W Broad St | Columbus |  |
| Spartan | 4141 Lockbourne Industrial Pkwy | Columbus |  |
| Spartan Logistics | 4051 Lockbourne Industrial Pkwy | Columbus |  |
| Spartan Warehouse \& Distbn | 4140 Lockbourne Rd | Columbus |  |
| Spin Craft | 707 Harmon Plaza | Columbus |  |
| Spring Works Inc | 801 Distribution Dr | Columbus |  |
| Star Packaging, Inc. | 4791 Roberts Rd | Columbus |  |
| Steelmasters of Columbus Inc | 660 Concrea Rd | Columbus |  |
| Steer \& Gear Inc | 1000 Barnett Rd | Columbus |  |
| Sterling Process Engineering \& Sevices | 333 McCormick Blvd | Columbus |  |
| Storage One | 5275 Gender Rd | Columbus |  |
| Suburbon Steel | 915 Distribution Dr | Columbus |  |
| Sunrise Foods Inc | 3120 Valleyview Dr | Columbus | P6/29/2012 |

2012 Categoty 1
Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Superior Welding Co Inc | 906 S Nelson Rd | Columbus |  |
| Swan Freedom | 1320 McKinley Ave Ste A | Columbus |  |
| Swan Manufacturing Company | 65 Kingston Ave | Columbus |  |
| Swift Transportation Inc | 4141 Parkwest Dr | Columbus |  |
| SYGMA | 4630 Journal St | Columbus |  |
| SYGMA | 2000 Westbelt Dr | Columbus |  |
| SYGMA Network Inc | 1901 Dividend Dr | Columbus |  |
| Tapha Trucking Inc | 3323 Refugee Rd | Columbus |  |
| Team Industrial Services Inc | 3005 Silver Dr | Columbus |  |
| Techdisposal | 320 Outerbelt St | Columbus |  |
| Thoroughbred Bulk Transfer | 5075 Fisher Rd | Columbus |  |
| Thurman Trucking Services Inc | 2580 Groveport Rd | Columbus |  |
| Thurns Specialty Meats Inc | 530 Greenlawn Ave | Columbus |  |
| TIP Trucking | 2800 International St | Columbus |  |
| Towne Air Freight Inc | 1860 Williams Rd | Columbus |  |
| Transfer Services LLC | 1981 S High St | Columbus |  |
| Transmet Corp | 4290 Perimeter Dr | Columbus |  |
| Transportation Resources Inc | 1120 Rarig Ave | Columbus |  |
| Tranz Lights, Inc. | 3487 E Fulton St | Columbus |  |
| Tri-State Supply Co Inc | 3840 Fisher Rd | Columbus |  |
| Tritex Corp. | 1390 Holly Ave | Columbus |  |
| U Part It LLC | 2055 Refugee Rd | Columbus |  |
| U Part It LLC | 2324 Refugee Rd | Columbus |  |
| U S Cloth Shop Inc | 1010 E Starr Ave | Columbus |  |
| U Store It | 5252 Nike Dr | Columbus |  |
| U-Haul | 7510 Worthington Galena Road | Columbus |  |
| U-Haul Moving \& Storage | 1211 Parsons Ave | Columbus |  |
| U-Haul Moving \& Storage @ 5th Ave | 1314 E Fifth Ave | Columbus |  |
| U-Haul of Worthington | 7472 Reliance St | Columbus |  |
| Uncle Bob's Self Storage | 851 W Henderson Rd | Columbus |  |
| Uncle Chucks Printing \& Signs | 2541 W Broad St | Columbus |  |

2012 Categoty 1

## Industry Summary

| Company | SiteAddress | City | InspectionDate2012 05 |
| :---: | :---: | :---: | :---: |
| Union County Cab LLC | 3823 Sullivant Ave | Columbus |  |
| United Poly \& Packaging | 1178 Joyce Ave | Columbus |  |
| United Security Seals Inc | 2000 Fairwood Ave | Columbus |  |
| Universal Auto Parts | 1061 McKinley Ave | Columbus |  |
| Universal Fabricating \& Constr | 1241 McKinley Ave | Columbus |  |
| Unlimited Transportation | 3540 Fisher Rd | Columbus |  |
| Ustek Inc | 4663 Executive Dr | Columbus |  |
| USTRG, LTD | 2111 International St | Columbus |  |
| V.A.T., Inc.-Columbus Bus Compound | 952 Brentnell Ave | Columbus |  |
| Valley Interior Systems Inc | 3840 Fisher Rd | Columbus |  |
| VanDyke Custom Iron Inc | 311 Outerbelt St | Columbus |  |
| Vellus Products Inc | 6442 Fiesta Dr 44 | Columbus |  |
| Victory Direct | 1685 Woodland Ave | Columbus |  |
| Vitale Poultry Co. | 800 E Cooke Rd | Columbus |  |
| W W Transport Inc | 405 Commerce Square | Columbus | P3/6/2012 |
| Warehouse Services | 2901 E 4th Ave | Columbus |  |
| Wasserstrom and Sons, N, Amtekco Industries Inc | 2300 Lockbourne Rd | Columbus |  |
| Wasserstrom Distribution Center | 521 Marion Rd | Columbus |  |
| Watkins Printing Co | 1401 E 17th Ave | Columbus |  |
| Weisenbach Specialty Printing | 437 Holtzman Ave | Columbus |  |
| Welch Packaging | 6969 Alum Creek Dr | Columbus |  |
| WGI Heavy Minerals, Inc./Spartan Logistics Storage | 4140 Lockbourne Rd | Columbus |  |
| Whirlpool Corp. | 6241 Shook Rd | Columbus |  |
| Wilsonart International | 2500 International St | Columbus |  |
| Worldwide Auto Recycling Inc | 844 N Cassady Ave | Columbus |  |
| Worldwide Flight Services Inc | 476 E Fifth Ave | Columbus |  |
| Worthington Steel Co., The | 1127 Dearborn Dr | Columbus | P9/12/2012 |
| Yi Xing Inc | 850 Busch Ct | Columbus |  |
| You Wrench It | 3040 S High St | Columbus |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| ITC Manufacturing Inc | 845 E Markison Ave | Columbus | No Exposure Certification | P9/6/2012 |
| T Marzetti Co | 3838 Indianola Ave | Columbus | General Permit | P9/26/2012 |
| Anheuser Busch, Inc | 700 Schrock Rd | Columbus | General Permit | P9/13/2012 |
| Syscom Advanced Materials Incorporated | 1275 Kinnear Rd Suite 5 | Columbus | No Exposure Certification | P8/23/2012 |
| Porcelain Steel Buildings Co (PSB CO)(White Castles) | 555 W Goodale St | Columbus | General Permit | P8/2/2012 |
| Calgon Carbon Corp | 835 N Cassady Ave | Columbus | General Permit | P8/16/2012 |
| Central Ohio Oil Inc | 795 Marion Rd | Columbus | General Permit | P8/13/2012 |
| Ball Corporation | 350 McCormick Blvd | Columbus | No Exposure Certification | P7/31/2012 |
| Birchwood Foods | 1821 Dividend Dr | Columbus | General Permit | P7/12/2012 |
| Burton Metal Finishing Inc | 1711 Woodland Ave | Columbus | General Permit | P6/7/2012 |
| Roxane Laboratories, Inc. (Boehringer Ingelheim Roxane, Inc) | 1809 N Wilson Rd | Columbus | No Exposure Certification | P6/28/2012 |
| Bodycote Thermal Processing (Metal Improvement Co) | 1515 Universal Rd | Columbus | No Exposure Certification | P6/20/2012 |
| Hirschvogel Inc | 2230 S Third St | Columbus | General Permit | P6/15/2012 |
| Liebert North America Inc | 1050 Dearborn Dr | Columbus | General Permit | P6/14/2012 |
| Quality Bakery CO | 50 N Glenwood Ave | Columbus | General Permit | P5/21/2012 |
| T Marzetti Co/Allen Division | 1709 Frank Rd | Columbus | General Permit | P5/21/2012 |
| CSC Worldwide | 4401 Equity Dr | Columbus | No Exposure Certification | P4/9/2012 |
| Herman Falter Packing Co The | 384 Greenlawn Ave | Columbus | No Exposure Certification | P4/30/2012 |
| Bron-Shoe Co | 1313 Alum Creek Dr | Columbus | No Exposure Certification | P4/25/2012 |
| Ohio Packing Co | 1340 Emig Rd | Columbus | No Exposure Certification | P4/24/2012 |
| AY Manufacturing Ltd | 5200 Crosswind Dr | Columbus | No Exposure Certification | P2-10-2012 |
| Krispy Kreme Doughnut Corp | 3690 W Dublin Granville Rd | Columbus | No Exposure Certification | P2/22/2012 |
| Engineered Profiles LLC <br> DBA Crane Plastics | 2141 Fairwood Ave | Columbus | General Permit | P2/2/2012 |
| Akzo Nobel Coatings Inc | 1313 Windsor Ave | Columbus | General Permit | P12-13-2012 |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| Arcelormittal Columbus LLC | 1800 Watkins Rd | Columbus | General Permit | P12/14/2012 |
| Mars Petcare US Inc | 5115 Fisher Rd | Columbus | General Permit | P11/28/2012 |
| Franklin International, Inc. | 2020 Bruck St | Columbus | General Permit | P11/1/2012 |
| V \& S Columbus Galvanizing LLC | 1000 Buckeye Park Rd | Columbus | General Permit | P10/9/2012 |
| Clean Water Ltd. | 2480 Jackson Pike | Columbus | No Exposure Certification | P10/31/2012 |
| English Bay Batter, Inc | 2241 City Gate Dr | Columbus | No Exposure Certification | P10/30/2012 |
| Pepsi Cola Bottling Co. of Columbus <br> ( G and J Pepsi Cola bottlers) | 1241 Gibbard Ave | Columbus | General Permit | P10/24/2012 |
| Capital Spring Division/M W Industries | 2000 Jetway Blvd | Columbus | No Exposure Certification | P10/23/2012 |
| Worthington Industries Inc/ Wothington Cyclinder Corp | 1085/1205 Dearborn Dr | Columbus | General Permit | P10/2/2012 |
| Jenis Splendid Ice Cream | 909 Michigan Ave | Columbus | No Exposure Certification | P10/18/2012 |
| American Bottling Co/Seven Up Beverages/Beverage Management | 950 Stelzer Rd | Columbus | No Exposure Certification | P10/10/2012 |
| COW Industries Inc | 1875 Progress Ave | Columbus | No Exposure Certification | P1/30/2012 |
| $\begin{array}{l}\text { Suttles Truck Leasing } \\ \text { (Dana Transport no exp research) }\end{array}$ <br> 䨋 | 1795 Feddern Ave | Columbus | No Exposure Certification | P1/25/2012 |
| Ohio Anodizing Co Inc | 915 N 20th St | Columbus | General Permit | P1/17/2012 |
| Panacea Products Corp | 1825 Joyce Ave | Columbus | No Exposure Certification | P1/17/2012 |
| Maramor Chocolates | 1855 E 17th Ave | Columbus | No Exposure Certification | P1/11/2012 |
| Mills Metal Finishing Inc | 1967 McAllister Ave | Columbus | General Permit | P1/11/2012 |
| PSC Metals Inc | 2205 Parsons Ave | Columbus | General Permit | 8-2-2012 |
| PSC Metals, Inc. Joyce Yard | 1283 Joyce Ave | Columbus | General Permit | 8-2-2012 |
| Advance Industrial Mfg | 1996 Longwood Ave | Columbus | General Permit | 7-5-2012 |
| Jetcoat | 472 Brehl Ave | Columbus | General Permit | 7-31-2012 |
| Pitt Plastics Inc | 3980 Groves Rd | Columbus | General Permit | 7-26-2012 |
| Masser Metals \& Recycling | 3103 Lamb Ave | Columbus | General Permit | 7-24-2012 |
| Ace Iron \& Metal | 2515 Groveport Rd | Columbus | General Permit | 7-17-2012 |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| Hamilton Tanks LLC | 2200 Refugee Rd | Columbus | General Permit | 7/3/2012 |
| Pactiv Corporation | 2120 Westbelt Dr | Columbus | General Permit | 6/12/2012 |
| Pactiv Corporation | 1999 Dividend Dr | Columbus | General Permit | 6/12/2012 |
| CSX Transportation Inc | 2600 Parsons Ave | Columbus | General Permit | 5-22-2012 |
| ConAgra Foods Inc | 4200 Sullivant Ave | Columbus | General Permit | 5-21-2012 |
| Columbus Ohio Recycling <br> \& Transfer Station (Rumpke of Ohio Inc) | 1191 Fields Ave | Columbus | General Permit | 5-15-2012 |
| Edison Automotive Inc | 1529 McKinley Ave | Columbus | General Permit | 11-8-2012 |
| Reliable Truck Parts Inc | 1950 Refugee Rd | Columbus | General Permit | 11-15-2012 |
| First Student, Inc. | 1798 Frebis Ave | Columbus | General Permit | 11/20/2012 |
| I H Schlezinger Inc | 1041 Joyce Ave | Columbus | General Permit | 10-5-2012 |
| CSX-Columbus Terminal | 2351 Westbelt Dr | Columbus | General Permit | 10-3-2012 |
| Wirthman Bros Inc | 3515 E Main St | Columbus | General Permit | 10-16-2012 |
| Norfolk Southern Railway Co | 2450 Fairwood Ave | Columbus | General Permit | 10/17/2012 |
| 1662 LLC (Ace Iron \& Metal Inc) | 1662 Williams Rd | Columbus | No Exposure Cerfification |  |
| 2700 International | 2700 International St | Columbus | No Exposure Certification |  |
| A.E. Cole II Inc | 5515 Chantry Dr | Columbus | No Exposure Certification |  |
| Abbott Nutrition | 1001 Checkrein Ave | Columbus | No Exposure Certification |  |
| Accurate IT Servi es | 690 Hadley Dr | Columbus | No Exposure Certification |  |
| ADEPT Properties LLC | 1313 Harmon Ave | Columbus | General Permit |  |
| Advance Machining \& Gear Inc | 2375 Harrisburg Pike | Columbus | No Exposure Certification |  |
| Advantage Tank Lines LLC | 500 Manor Park Dr | Columbus | General Permit |  |
| Aerospace Lubricants Inc | 1600 Georgesville Rd | Columbus | No Exposure Certification |  |
| Allied Mineral Products Inc | 2700 Scioto Pkwy | Columbus | General Permit |  |
| America's Body Company Dist LLC/Leggett \& Platt Co | 939 E Starr Ave | Columbus | No Exposure Certification |  |
| AMETEK HDR Power Systems | 3563 Interchange Rd | Columbus | No Exposure Certification |  |
| AMETEK Solidstate Controls | 875 Dearborn Dr | Columbus | No Exposure Certification |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| AMT Machine Systems | 868 Freeway Dr N | Columbus | No Exposure Certification |  |
| ANDA PHARMACEUTICALS | 6500 Adelaide Ct | Columbus | No Exposure Certification |  |
| Appian Manufacturing Corp | 2025 Camaro Dr | Columbus | No Exposure Certification |  |
| ARKOTE | 1585 Frebis LN | Columbus | No Exposure Certification |  |
| Auld Technologies Inc | 2030 Dividend Dr | Columbus | No Exposure Certification |  |
| Avure Technologies | 3721 Corporate Dr | Columbus | No Exposure Certification |  |
| A-Z Recycling, 1465 Part Ltd aka | 1465 E 17th Ave | Columbus | General Permit |  |
| Beckman XMO | 376 Morrison Rd Suite D | Columbus | No Exposure Certification |  |
| Big Lots - Fisher Rd Distribution Center | 5303 Fisher Rd | Columbus | No Exposure Certification |  |
| Big Lots Stores Inc | 500 Phillipi Rd | Columbus | General Permit |  |
| Bobcat Taxi Cab Service | 1097 Camden Ave | Columbus | No Exposure Certification |  |
| Bolton Field Airport | 2000 Norton Rd | Columbus | General Permit |  |
| Boss Display Corp | 2001 Camaro Dr | Columbus | No Exposure Certification |  |
| Bradshaw Co CH | 2004 Hendrix Dr | Columbus | No Exposure Certification |  |
| Brothers Drake Mead | 26 E Fifth Ave | Columbus | No Exposure Certification |  |
| Buck Equipment/AIM Attachments | 1720 Feddern Ave | Columbus | No Exposure Certification |  |
| Buckeye Case Works | 440 Woodland Ave | Columbus | No Exposure Certification |  |
| Buckeye Stamping Co Inc | 555 Marion Rd | Columbus | No Exposure Certification |  |
| Budget Storage | 6805 Commerce Court Dr. | Columbus | No Exposure Certification |  |
| Bulldog Media Blasting | 1100 Rarig Ave Suite J | Columbus | No Exposure Certification |  |
| Capital City Awning | 577 N 4th St | Columbus | No Exposure Certification |  |
| Capital Pros \& Ortho Center | 4678 Larwell Dr | Columbus | No Exposure Certification |  |
| Cardinal Self Storage | 7535 Alta View Blvd | Columbus | No Exposure Certification |  |
| Cardinal Truss \& Components Division of Building Concepts Inc | 6868 Canal Rd | Columbus | General Permit |  |
| Central Ohio Tactical Coatings | 1511A Alum Creek Dr | Columbus | No Exposure Certification |  |
| Central Ohio Transit Authority | 1600 McKinley Ave | Columbus | No Exposure Certification |  |
| Central Ohio Transit Authority | 1333 Fields Ave | Columbus | No Exposure Certification |  |

## Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection <br> Date |
| :--- | :--- | :--- | :--- | :--- |
| Central Ohio Transit Authority | Columbus | No Exposure Certification |  |  |
| Central Transport Inc | 2450 Fields Ave | Columbus | General Permit |  |
| Chatterton Self Storage | 5621 Chatterton Rd | Columbus | No Exposure Certification |  |
| Cher Inc dba The Window Shop | 4720 Kenny Rd | Columbus | No Exposure Certification |  |
| City of Columbus Alum Cree <br> Transfer Station | Columbus | General Permit |  |  |
| City of Columbus Compost Facility | 7000 State Route 104/ <br> Jacksonville Pike | Columbus | General Permit |  |
| City of Columbus <br> Div of Sewerage \& Drainage JPTP | 2104 Jackson Pike | Columbus | General Permit |  |
| City of Columbus <br> Morse Road Transfer Station | 4260 Morse Rd | Columbus | General Permit |  |
| City of Columbus Refuse <br> Georgesville Road Tranfer Station | 1550 Goergesville Rd | Columbus | General Permit |  |
| City of Columbus Southerly WWTP | 6977 S High St | Columbus | General Permit |  |
| Classic Solutions, Inc. | $4140-$ Fisher Rd | Columbus | No Exposure Certification |  |
| Cloverleaf Cold Storage | 2350 New World Drive | Columbus | No Exposure Certification |  |
| Coalescence LLC | 3455 Millennium Ct | Columbus | General Permit |  |
| Columbus Cold Storage/ <br> Capital City Ice (D\&D Group) | Columbus | No Exposure Certification |  |  |
| Columbus Connection <br> (Mt Carmel Health) | Columbus | General Permit |  |  |
| Columbus DC <br> Rolling Frito-Lay Sales LP) | Columbus | No Exposure Certification |  |  |
| Columbus Dispatch | Columbus | No Exposure Certification |  |  |
| Columbus Glass \& Mirror Inc | Columbus | No Exposure Certification |  |  |
| Columbus Instruments Intl | Columbus | General Permit |  |  |
| Columbus Jack Corporation | 3165 Dublin Rd |  |  |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| Columbus Roof Trusses Inc | 2525 Fisher Rd | Columbus | No Exposure Certification |  |
| Compusource Tech | 1600 Integrity Dr | Columbus | No Exposure Certification |  |
| Concept Wear | 950 Oakland Park Ave | Columbus | No Exposure Certification |  |
| Container Management Company LLC | 1200 Corrugated Way | Columbus | No Exposure Certification |  |
| Con-Way Freight - XCO | 2625 Westbelt Dr | Columbus | General Permit |  |
| Core Molding Technologies Inc | 800 Manor Park Dr | Columbus | General Permit |  |
| Crete Carrier Corp | 5400 Crosswind Dr | Columbus | General Permit |  |
| CubeSmart | 5411 W Broad St | Columbus | No Exposure Certification |  |
| Decker Construction Co | 3040 McKinley Ave | Columbus | General Permit |  |
| Dick Cold Storage/ Capital City Ice (D\&D Group Ltd) | 3080/3100 Valleyview Dr | Columbus | General Permit |  |
| Digico Imaging Inc | 3487 E Fulton St | Columbus | No Exposure Certification |  |
| Dublin Road Mini Storage, LLC | 2087 Dublin Rd | Columbus | No Exposure Certification |  |
| E.E. Case Drop-Lot | 994 Frank Rd | Columbus | No Exposure Certification |  |
| Entrotech Inc | 1245 \& 1255 Kinnear Rd | Columbus | No Exposure Certification |  |
| Environmental Reclaim | 3900 Sullivant Ave | Columbus | No Exposure Certification |  |
| Exterior Portfolio LLC | 1441 Universal Rd | Columbus | General Permit |  |
| Exterior Portfolio LLC | 1550 Universal Rd | Columbus | General Permit |  |
| Extra Space Storage | 2929 Dublin Rd | Columbus | No Exposure Certification |  |
| Extra Space Storage | 3015 W Dublin Granville Rd | Columbus | No Exposure Certification |  |
| Extra Space Storage | 2087 S Hamilton Rd | Columbus | No Exposure Certification |  |
| Extra Space Storage | 191 N Wilson Rd | Columbus | No Exposure Certification |  |
| Extra Space Storage | 4616 Kenny Rd | Columbus | No Exposure Certification |  |
| Ezzo Sausage Co. | 1802 Lockbourne Rd | Columbus | No Exposure Certification |  |
| FASTSIGNS | 5117 E Main | Columbus | No Exposure Certification |  |
| Fedex Express-OSUA | 2424 Citygate Dr | Columbus | No Exposure Certification |  |
| Five Star Cardinal Self Storage | 4111 Groves Rd | Columbus | No Exposure Certification |  |
| FST Logistics | 1727 Georgesville Rd | Columbus | No Exposure Certification |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| FST Logistics Inc | 2040 Atlas St | Columbus | No Exposure Certification |  |
| Gateway Self Storage | 750 E 11th Ave | Columbus | No Exposure Certification |  |
| G-Cor Automotive | 2100 Refugee Rd | Columbus | General Permit |  |
| G-Corr Automotive | 2025 Corvair Ave | Columbus | No Exposure Certification |  |
| General Theming Contractors | 3750 Courtright Ct | Columbus | No Exposure Certification |  |
| Genpak | 845 Kaderly Drive | Columbus | General Permit |  |
| Glockner Oil Co Inc | 2144 John Glenn Ave Suite B | Columbus | No Exposure Certification |  |
| Greyhound Lines INC \#250338 | 111 E Town St | Columbus | General Permit |  |
| Griffin Industries Inc | 808 Distribution Dr | Columbus | No Exposure Certification |  |
| Harris Paper Crafts Inc | 266 E Fifth Ave | Columubs | No Exposure Certification |  |
| Hogan Truck Leasing Inc | 2550 Westbelt Dr | Columbus | General Permit |  |
| Honeywell | 2080 Arlingate Ln | Columbus | General Permit |  |
| Hopkins Printing | 2246 Citygate Dr | Columbus | No Exposure Certification |  |
| Hymes Company | 4301 E 5th Ave | Columbus | No Exposure Certification |  |
| IFCO Pallet Systems | 2130 New World Dr | Columbus | No Exposure Certification |  |
| Ink Well, The | 1939 E Dublin Granville Rd | Columbus | No Exposure Certification |  |
| J B Hunt Transport Inc - Columbus | 5435 Crosswind Dr | Columbus | General Permit |  |
| JACO Environmental Inc | 4180 Perimeter Dr | Columbus | No Exposure Certification |  |
| Jacobi Carbons Inc | 432 McCormick Blvd | Columbus | General Permit |  |
| Jacobson Distribution Company | 2642 Fisher Rd | Columbus | No Exposure Certification |  |
| Jones Fuel Co | 350 Frank Rd | Columbus | General Permit |  |
| Karn Meats Inc | 922 Taylor Ave | Columbus | No Exposure Certification |  |
| Kenwel Printers Inc | 4272 Indianola Ave | Columbus | No Exposure Certification |  |
| Key Finishes LLC | 727 Harrison Dr | Columubs | No Exposure Certification |  |
| KF Express Inc | 430-440 Greenlawn Ave | Columbus | No Exposure Certification |  |
| Lakefront Lines Inc | 3152 E 17th Ave | Columbus | No Exposure Certification |  |
| Leaders Moving \& Storage Co | 7455 Alta View Blvd | Columbus | No Exposure Certification |  |
| Lifecare Medical Services Inc | 3065 E 14th Ave | Columbus | No Exposure Certification |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection |
| :---: | :---: | :---: | :---: | :---: |
| LV Trucking Inc | 2440 Harrison Rd | Columbus | No Exposure Certification |  |
| MAC Tools | 4380 Old Roberts Rd | Columbus | No Exposure Certification |  |
| Magnetic Springs Water Co. Inc | 1917 Joyce Ave | Columbus | No Exposure Certification |  |
| Magnum Press | 45 Lazelle Rd | Columbus | No Exposure Certification |  |
| Marble Cliff Oil Co | 2057 Dublin Rd | Columbus | General Permit |  |
| Marcy Enterprises, Inc. | 2977 Lamb Ave | Columbus | No Exposure Certification |  |
| Materials Science International, Inc. | 1660 Georgesville Rd | Columbus | No Exposure Certification |  |
| McCabe Print Works | 2910 Scioto Darby Executive Ct | Columbus | No Exposure Certification |  |
| McGraw-Hill Companies The | 8787 Orion Pl | Columbus | No Exposure Certification |  |
| Mettler-Toledo Inc | 1150 Dearborn Dr | Columbus | No Exposure Certification |  |
| Meyer Machine Tool Co | 3434 E 7th Ave | Columbus | No Exposure Certification |  |
| Microweld Engineering, Inc. | 7451 Oakmeadows Dr | Columbus | No Exposure Certification |  |
| Middle West Spirits | 1230 Courtland Ave | Columbus | No Exposure Certification |  |
| Middleton Printing Co Inc | 1220 Corrugated Way | Columbus | No Exposure Certification |  |
| Mid-Ohio Electric Co | 1170 McKinley Ave | Columbus | No Exposure Certification |  |
| Midwest Strapping Products | 1819 Walcutt Rd 13 | Columbus | No Exposure Certification |  |
| Monesi Trucking Co Inc | 1715 Atlas St | Columbus | No Exposure Certification |  |
| Morningstar Mini Storage of Georgesville | 1531 Georgesville Rd | Columbus | No Exposure Certification |  |
| Morrison Medical | 3735 Paragon Dr | Columbus | No Exposure Certification |  |
| Morrison Sign Co Inc | 2757 Scioto Pkwy | Columbus | No Exposure Certification |  |
| Morse Precision Automatics Co | 2060 S High St | Columbus | No Exposure Certification |  |
| National Lime \& Stone Co | 4390 Fisher Rd | Columbus | General Permit |  |
| Nelson Co , The <br> Nexergy Inc | 1951 Galaxie St | Columbus | No Exposure Certification |  |
| Nexergy Inc <br> Noise Suppression Technologies | 1909 Arlingate Ln | Columbus | No Exposure Certification |  |
| Noise Suppression Technologies <br> Norse Dairy Systems | 4182 Fisher Rd | Columbus | No Exposure Certification |  |
| Norse Dairy Systems <br> Novotec Recycling LLC | 1740 E 17th Ave | Columbus | No Exposure Certification |  |
| Novotec Recycling LLC <br> Nutis Press Inc | 3960 Groves Rd | Columbus | General Permit |  |
| Nutis Press Inc | 3540 E Fulton St | Columbus | No Exposure Certification |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| Ohio Drop Off | 2899 Morse Rd | Columbus | No Exposure Certification |  |
| Ohio E-Waste Recycling Inc | 2050 Williams Rd | Columbus | No Exposure Certification |  |
| Ohio Mortgage Forms Inc | 1234 Williams Rd | Columbus | No Exposure Certification |  |
| Ohio Mulch Supply | 1600 Universal Rd | Columbus | General Permit |  |
| Ohio State Facility/ <br> AKA Ohio State Container/ <br> Consolidated Conatiner CO LP | 1917 Joyce Ave | Columbus | General Permit |  |
| Ohio State University - Airport | 2160 Case Rd | Columbus | General Permit |  |
| Oil Distributing Co | 2181 Hardy Parkway St | Columbus | General Permit |  |
| Old Dominion Freight Line Inc | 2885 Alum Creek Dr | Columbus | General Permit |  |
| Old Trail Printing Co, The | 100 Fornoff Rd | Columbus | No Exposure Certification |  |
| Optimum Print Solutions | 5051 Freeway Dr E | Columbus | No Exposure Certification |  |
| P H P K Technologies | 2111 Builders Pl | Columbus | No Exposure Certification |  |
| Pactiv LLC | 2781 Westbelt Dr | Columbus | No Exposure Certification |  |
| Panacea Products Corp | 2711 International St | Columbus | No Exposure Certification |  |
| Pasta Ditonis Inc | 733 N James Rd | Columbus | No Exposure Certification |  |
| Peebles Herzog Inc | 50 Hayden Ave | Columbus | No Exposure Certification |  |
| Phillip's Oil Co Inc Of Ohio | 1877 McKinley Ave | Columbus | No Exposure Certification |  |
| Pinnacle Metal Products Inc | 1701 Woodland Ave | Columbus | No Exposure Certification |  |
| Pitt Ohio Express LLC | 2101 Hardy Parkway St | Columbus | General Permit |  |
| Plastic Suppliers Inc | 2400 \& 2450 Marilyn Park Lane | Columbus | General Permit |  |
| Possible Plastics Inc | 1620 Feddern Ave Bldg B | Columbus | No Exposure Certification |  |
| Precision Foods, Inc | 683 Manor Park Dr | Columbus | No Exposure Certification |  |
| Pressure Connections Corp. | 610 Claycraft Rd | Columbus | No Exposure Certification |  |
| Printing By Wilson | 2733 Winchester Pike | Columbus | No Exposure Certification |  |
| Public Storage - 21515 | 4511 Eastland Dr | Columbus | No Exposure Certification |  |
| Public Storage - 24333 | 4060 Morse Rd | Columbus | No Exposure Certification |  |
| Public Storage - 24334 | 4600 Kenny Rd | Columbus | No Exposure Certification |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| Public Storage - 24335 | 6401 Busch Blvd | Columbus | No Exposure Certification |  |
| Public Storage - 24416 | 4990 Sinclair Rd | Columbus | No Exposure Certification |  |
| Public Storage - 24420 | 6750 Ambleside Dr | Columbus | No Exposure Certification |  |
| Public Storage - 28219 | 2719 Morse Rd | Columbus | No Exposure Certification |  |
| PXP OHIO | 6800 Tussing Rd | Columbus | No Exposure Certification |  |
| Quadra-Tech Inc | 860 E Jenkins Ave | Columbus | No Exposure Certification |  |
| Quality Rubber Stamp Inc | 3314 Refugee Rd | Columbus | No Exposure Certification |  |
| R \& J Bardon Inc | 4676 Larwell Dr | Columbus | No Exposure Certification |  |
| Recycling Exchange North Inc | 2830 Westerville Rd | Columbus | No Exposure Certification |  |
| Republic Services Inc/ <br> Reynolds Ave Transfer Station | 805 Reynolds Ave | Columbus | General Permit |  |
| Rickly Hydrological Co Inc | 1700 Joyce Ave | Columbus | No Exposure Certification |  |
| Rimrock Corporation | 1700 Jetway Blvd | Columbus | General Permit |  |
| RNS Columbus/ <br> Vertis Communication INC | 4051 Fondorf Dr | Columbus | No Exposure Certification |  |
| Robey Tool \& Machine | 1593 E 5th Ave | Columbus | No Exposure Certification |  |
| Rock Tenn Recycling Facility | 1015 Marion Rd | Columbus | General Permit |  |
| S\&T Truck \& Auto Service Inc | 3150 Valleyview Dr Rm 8 | Columbus | No Exposure Certification |  |
| Saia Motor Freight Line, LLC | 1717 Krieger St | Columbus | General Permit |  |
| Savko Plastic Pipe \& Fittings | 683 E Lincoln Ave | Columbus | No Exposure Certification |  |
| SCI Engineered Materials Inc | 2839 Charter St | Columbus | No Exposure Certification |  |
| Scriptel Corp <br> Security Self Storage | 4145 Arlingate Plz | Columbus | No Exposure Certification |  |
| Security Self Storage <br> Seekirk Inc | 4600 Fisher Rd | Columbus | No Exposure Certification |  |
| Seekirk Inc <br> ShadeTree Systems, LLC | 2420 Scioto Harper Dr | Columbus | No Exposure Certification |  |
| Sherwin-Williams Co | 2121 New World Dr | Columbus | No Exposure Certification |  |
| Simpson Strong-Tie Co Inc | 2600 International St | Columbus | No Exposure Certification |  |
| Slone Graphics LLC | 945 W Third Ave | Columbus | No Exposure Certification |  |

## 2012 Category 2

Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection <br> Date |
| :--- | :--- | :--- | :--- | :--- |
| Sonoco Products Co | 444 McCormick Blvd | Columbus | No Exposure Certification |  |
| SouthPrint | 7525 Pingue Dr | Columbus | No Exposure Certification |  |
| Specialty Services Inc | 1382 Ohlen Ave | Columbus | No Exposure Certification |  |
| Spillman Co | 1701 Moler Rd | Columbus | General Permit |  |
| Stericycle Inc | 2341 Lockbourne Rd | Columbus | No Exposure Certification |  |
| Stone \& Granite Co, The | 1300 Refugee Lane | Columbus | No Exposure Certification |  |
| Stor All | 824 W Fifth Ave | Columbus | No Exposure Certification |  |
| Strawser Construction Inc | 1595 Frank Rd | Columbus | General Permit |  |
| Style-Rite Awnings | 572 S Nelson Rd \#N | Columbus | No Exposure Certification |  |
| Superior Production Partnership LLC | 1405 Marion Rd | Columbus | General Permit |  |
| Superior Production Partnership LLC | 2301 Fairwood Ave | Columbus | No Exposure Certification |  |
| Sysco | 2400 Harrison Rd | Columbus | No Exposure Certification |  |
| T E Martindale Enterprises Inc | 2840 E 5th Ave | Columbus | No Exposure Certification |  |
| T Marzetti Co | 3770 Indianola Ave | Columbus | No Exposure Certification |  |
| T Marzetti Co (R\&D Technical Services) | 3900 Indianola Ave | Columbus | No Exposure Certification |  |
| Tarrier Foods Corp | 3915 Zane Trace Dr | Columbus | General Permit |  |
| Tarrier Steel Co., The | 1379 S 22nd ST | Columbus | No Exposure Certification |  |
| Terminal Warehouse Inc | 1658 Williams Rd | Columbus | General Permit |  |
| TKS Industrial Company | 1939 Refugee Rd | Columbus | No Exposure Certification |  |
| Transflo Terminal Services Inc, <br> Columbus Transflo Terminal | Columbus | No Exposure Certification |  |  |
| Tri-Modal Service Inc | 3100 Lockbourne Rd | Columbus | No Exposure Certification |  |
| Trio Insulated Glass Inc | Columbus | No Exposure Certification |  |  |
| Tubelite Co Inc | Columbus | No Exposure Certification |  |  |
| Uncle Bobs Self Storage \#711 | Columbus | No Exposure Certification |  |  |
| Uncle Bob's Self Storage \#724 | Columbus | No Exposure Certification |  |  |
| Uncle Bobs Self Storage \#810 |  |  |  |  |
| Unico Alloys \& Metals Inc | 1094 McKinley Ave |  |  |  |
|  | 4735 Refagee LN | E460 E Broad St Drive |  |  |

2012 Category 2
Industry Summary

| Company | SiteAddress | City | PermitStatus | Inspection Date |
| :---: | :---: | :---: | :---: | :---: |
| United McGill Corporation | 1779 Refugee Rd | Columbus | No Exposure Certification |  |
| United Parcel Service -UPS Ground Freight Inc | 3400 Refugee Rd | Columbus | General Permit |  |
| United Parcel Service-UPS Trabue | 5101 Trabue Rd | Columbus | General Permit |  |
| United States Postal Service | 850 Twin Rivers Dr | Columbus | No Exposure Certification |  |
| United States Postal Service | 2323 Citygate Dr | Columbus | No Exposure Certification |  |
| United States Postal Service West Worthington | 6316 Nicholas Dr | Columbus | No Exposure Certification |  |
| UPS Cartage Services | 1711 Georgesville Rd | Columbus | General Permit |  |
| USF Holland Inc C/O YRC Enterprise Services Inc | 4800 Journal St | Columbus | General Permit |  |
| V \& S Columbus Galvanizing LLC | 987 Buckeye Park Road | Columbus | General Permit |  |
| Vectra Inc | 3950 Business Park Dr | Columbus | No Exposure Certification |  |
| Vestcom | 848 Freeway DrN | Columbus | No Exposure Certification |  |
| Vincent Direct | 3560 Millikin Ct | Columbus | No Exposure Certification |  |
| Ward Trucking LLC | 1601 McKinley Ave | Columbus | No Exposure Certification |  |
| Weldon, A Division of Akron Brass | 3700 Zane Trace Dr STE A | Columbus | No Exposure Certification |  |
| Weldon, A Division of Akron Brass Co | 3656 Paragon Dr | Columbus | No Exposure Certification |  |
| Westbelt Storage | 4445 Old Roberts Rd | Columbus | No Exposure Certification |  |
| Wheel Medic Inc | 2971 Silver Dr | Columbus | No Exposure Certification |  |
| Wolf Metals Inc | 521 Harmon Ave | Columbus | No Exposure Certification |  |
| Wolfden Products Inc | 3991 Fondorf Dr | Columbus | No Exposure Certification |  |
| Wyandotte Winery LLC | 4640 Wyandotte Dr | Columbus | No Exposure Certification |  |
| Yazaki North America | 5353 Fisher Rd | Columbus | No Exposure Certification |  |
| Yellow Transportation Inc (YRC INC 218) | 5400 Fisher Rd | Columbus | No Exposure Certification |  |
| Yenkin Majestic Paint Corp. O P C Polymers Co. | 1920 Leonard Ave | Columbus | General Permit |  |

## 2012 NPDES Stormwater Sampling

## Five City - Owned Outfalls

## Introduction

The report titled " 2012 NPDES Stormwater Sampling Summary - Five City-Owned Outfalls" is being prepared in fulfillment of requirements set forth in the City of Columbus' MS4 Permit, OEPA Permit No. 4PI00000*CD. The permit requires implementation of a Wet Weather Monitoring Program (the Program), including annual reporting and evaluations of the monitoring program through the fiveyear permit cycle. The annual report provides an evaluation of the data collected to date in the program.

This report summarizes monitoring activities for the first year of a new five year permit-cycle at the five outfall locations monitored during permit No. 4PI00000*BD. Results from the last five year cycle have been incorporated into program averages displayed in the various summary tables throughout this report. Table 1, below, represents a summary of the previous reports submitted under permit Nos. 4PI00000*BD and 4PI00000*CD.

Table 1 - Summary of Program Reports

| PermitNo. | Calendar <br> Year | Report Date |
| :---: | :---: | :---: |
| 4PI00000*BD | $2007-2011$ | March 7, 2012 (final report) |
| 4P100000*CD | 2012 | February 18, 2013 |
| 4P100000*CD | 2013 | TBD |
| 4PI00000*CD | 2014 | TBD |
| 4PI00000*CD | 2015 | TBD |
| 4PI00000*CD | 2016 | TBD |

While negotiating a new monitoring strategy with Ohio EPA under permit No. $4 \mathrm{PI} 00000^{*} \mathrm{CD}$, the City was able to collect samples during the second, third, and fourth quarters of 2012. Analyses of the samples were performed by Pace Analytical, Inc. and the Columbus Surveillance Laboratory. Each laboratory analyzed the samples with regard to the parameters summarized in Table 2, below.

Smith

Table 2: Summary of Laboratory Parameter Responsibility

| Pace Analytical, Inc. |  |  |
| :--- | :---: | :---: |
| Parameter | Abbreviation | Unit of <br> Measure |
| Fecal Coliform | - | $\# / 100 \mathrm{ml}$ |
| E. Coli | - | $\# / 100 \mathrm{ml}$ |
| Nitrite | $\mathrm{NO}_{2}$ | $\mathrm{mg} / 1$ |
| Carbonaceous Biochemical Oxygen <br> Demand | $\mathrm{CBOD}_{5}$ | $\mathrm{mg} / \mathrm{l}$ |
| Biochemical Oxygen Demand | $\mathrm{BOD}_{5}$ | $\mathrm{mg} / \mathrm{l}$ |
| Chemical Oxygen Demand | COD | $\mathrm{mg} / \mathrm{l}$ |
| Orthophosphate | - | $\mathrm{mg} / 1$ |
| Total Suspended Solids | TSS | $\mathrm{mg} / \mathrm{l}$ |
| Total Phosphorous | - | $\mathrm{mg} / \mathrm{l}$ |
| Ammonia | NH 3 | $\mathrm{mg} / \mathrm{l}$ |
| Alkalinity | - | $\mathrm{mg} / \mathrm{l}$ |
| Oil and Grease | - | $\mathrm{mg} / \mathrm{l}$ |
| Total Cyanide | - | $\mu \mathrm{g} / \mathrm{l}$ |
| Hardness | - | $\mathrm{mg} / \mathrm{l}$ |
| Total Recoverable Cadmium | Cd | $\mu \mathrm{g} / \mathrm{l}$ |
| Total Recoverable Chromium | Cr | $\mu \mathrm{g} / \mathrm{l}$ |
| Total Recoverable Copper | Cu | $\mu \mathrm{g} / \mathrm{l}$ |
| Total Recoverable Lead | Pb | $\mu \mathrm{g} / \mathrm{l}$ |
| Total Recoverable Nickel | Ni | $\mu \mathrm{g} / 1$ |
| Total Recoverable Zinc | Zn | $\mu \mathrm{g} / \mathrm{l}$ |

## Stormwater Pollutant Sources

Stormwater pollutants monitored for the Columbus program are often released by materials or products used in construction, transportation, manufacturing, and in residential areas. For example:

- Galvanized roofs and gutters, paint, and tires are common sources of zinc
- Brake pads, antifreeze, and pesticides are possible sources of copper
* Burning fuels and batteries are common sources of cadmium
* Fertilizers, detergents, and organic matter are common sources of nitrogen.
* Pets, wildlife, and failing home septic systems are common sources of bacteria.

It is important to note that there can be many different sources that contribute to the level of pollutants in stormwater.

## Sampling Locations

Sampling was conducted within drainages representing different types of land uses: residential, mixed residential (single family and multi-family), commercial, and índustrial. Table 3, below, presents a summary of the land use, tributary acreage, and location of the outfalls sampled.

Table 3: Summary of City Sampling Locations

| Site | Land Use | Tributary <br> Area (ac) | Location |
| :--- | :--- | :--- | :--- |
| MH-1A | Medium Density Residential | 77 | Sawbury Blvd and Warrington <br> Way |
| MH-02 | Commercial | 61 | Sawmill Pl Blvd and Bent Tree <br> Blvd |
| MH-03 | Industrial | 11 | Joyce Ave and Windsor Ave |
| MH-4B | High-Density Residential | 45 | Clarendon Ave, south of Farifield <br> Pl |
| MH-05 | Multi-Family Residential | 49 | Petzinger Rd and Courtright Rd |

## Description of Sampling Locations

Figure 1 illustrates the location of each sampling site; which are described in further detail below:
MH-1A: This sampling point is located near the intersection of Sawbury Boulevard and Warrington Way, on the inflow pipe to the Billingsley Road Retention Pond. The stormwater monitored at this location comes from a tributary area of approximately 77 acres of medium-density residential land use.

MH-02: This sampling point is located at the headwall along Sawmill Place Boulevard near its intersection with Bent Tree Boulevard, on the inflow pipe to the retention basin south of Anderson's. The stormwater monitored at this location comes from a tributary area of approximately 61 acres of commercial land use.

MH-03: This sampling point is located near the intersection of Joyce Avenue and Windsor Avenue. Samples are collected from a manhole on the storm sewer that leads to a culvert located on the edge of Jeff's Place Bar parking lot. The stormwater monitored at this location comes from a tributary area of approximately 11 acres of industrial land use.

MH-4B: This sampling point is located in a manhole at the northeast corner of Clarendon Avenue and the first alley south of Fairfield Place. The stormwater monitored at this location comes from a tributary area of approximately 45 acres of high-density residential land use.

MH-05: This sampling point is located at the manhole in the field south of Petzinger Road and east of the intersection of Petzinger Road and Courtright Road. The stormwater monitored at this location comes from a tributary area of approximately 49 acres of multi-family residential land use.

## Sampling Events and Rainfall Data

Rainfall event characteristics for each sampling event in 2012 were obtained from rain gauges located throughout the City. Rain gauges used for this program were selected based on their proximity to the established program sampling sites; and are illustrated in Figure 1.

Table 4 provides a summary of the dates when sampling occurred at each location during Quarters 2 through 4. Table 5 provides a summary of the rain events during which sampling was performed. Hydrographs for these rain events are included in Appendix A.

Table 4 - Summary of Sampling Events (by location)

| Location | Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4 |
| :---: | :---: | :---: | :---: | :---: |
| MH-1A | (no event sampled) ${ }^{1}$ | 06/29/2012 | 09/08/2012 | 11/12/2012 ${ }^{2}$ |
| MH-02 | (no event sampled) ${ }^{1}$ | 06/29/2012 | 09/08/2012 | 12/02/2012 |
| MH-03 | (no event sampled) ${ }^{1}$ | 06/29/2012 ${ }^{2}$ | 09/07/2012 | 11/12/2012 |
| MH-4B | (no event sampled) ${ }^{1}$ | 06/29/2012 ${ }^{3}$ | 09/08/2012 | 11/12/2012 |
| MH-05 | (no event sampled) ${ }^{1}$ | 06/29/2012 | 09/08/2012 | 11/12/2012 |
| ${ }^{1}$ sample collection began $2^{\text {nd }}$ quarter of 2012, following permit negotiations between Ohio EPA and the City. |  |  |  |  |
| ${ }^{2}$ no flow data available due to sensor malfunction, event composite sample prepared and analyzed |  |  |  |  |
| ${ }^{3}$ Bacterial samples for the Hr .0 sample and Equipment Blank sample were not analyzed. The sample containers were damaged and leaked during the storage / transportation process not leaving enough sample volume for analysis. |  |  |  |  |

Table 5 - Summary of Rainfall Data (by event date)

| Quarter 1- (no event sampled) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Quarter 2-06/29/2012 |  |  |  |  |
| Location | Rain Gauge | Total V (in) | Antecedent Period (day) ${ }^{2}$ | Duration (hr:min) |
| MH-1A | RG1 | 0.69 | 6 | 1:50 |
| MH-02 | RG1 | 0.69 | 6 | 1:50 |
| MH-03 | RG22 | 0.59 | 6 | 2;00 |
| MH-4B ${ }^{1}$ | RG22 | 0.59 | 6 | 2:00 |
| MH-05 | RG18 | 0.59 | 6 | 2:35 |
| Quarter 3-09/07/2012 |  |  |  |  |
| Location | Rain Gauge | Total V (in) | Antecedent Period (day) | Duration (hr:min) |
| MH-03 ${ }^{2}$ | RG22 | 0.61 | 1.35 | 7:20 |
| Quarter 3-09/08/2012 |  |  |  |  |
| Location | Rain Gauge | Total V (in) | Antecedent Period (day) | Duration (hr:min) |
| MH-1A | RG1 | 1.21 | 2.74 | 7:55 |
| MH-02 | RG1 | 1.21 | 2.74 | 7:55 |
| MH-4B ${ }^{1}$ | RG22 | 0.61 | 1.35 | 7:20 |
| MH-05 | RG18 | 0.65 | 1.34 | 7:15 |
| Quarter 4-11/12/2012 |  |  |  |  |
| Location | Rain Gauge | Total V (in) | Antecedent Period (day) | Duration (hr:min) |
| MH-1A | RG1 | 0.80 | 2.20 | 8:50 |
| MH-03 | RG22 | 0.58 | 2.25 | 8:20 |
| MH-4B ${ }^{1}$ | RG22 | 0.58 | 2.25 | 8:20 |
| MH-05 | RG18 | 0.62 | 11.05 | 8:00 |
| Quarter 4-12/02/2012 |  |  |  |  |
| Location | Rain Gauge | Total V (in) | Antecedent Period (day) | Duration (hr:min) |
| MH-02 | RG1 | 0.29 | 9 | 3:15 |
| ${ }^{1}$ RG4280, used in past years for this location, reported no data for 2012. For this reason, the next closest rain gauge in the program was utilized for reported data (RG22). |  |  |  |  |
| ${ }^{2}$ Trace amounts of precipitation were recorded on available weather monitoring stations; therefore rain event data from 09/08/2012 (early morning rain event) was populated for this sampling event. |  |  |  |  |

## NPDES Dry-Weather Sampling Results

No dry-weather sampling was performed during 2012. Dry weather sampling for the current five sites was performed in 2007. The results, as analyzed by Alpha Omega Environmental Services, Inc. and the Columbus Surveillance Laboratory, were reported in the 2007 NPDES Stormwater Wet Weather

Sampling Summary (2008). Following the first year of this program (2007), dry weather sampling is only necessary in the event that a new sampling location is established.

## NPDES Wet Weather Sampling Results

This section presents data from each of the three sampled quarters in 2012 as analyzed by Pace Analytical, Inc. and the Columbus Surveillance Laboratory. These values are reported for each location in Tables 6 through 10 found in Appendix B. The quarterly event mean concentrations (EMC) for each sampling location were averaged to determine the annual mean for each of the sampled parameters.

The EMC of a pollutant is defined as the total pollutant mass discharged during a runoff event divided by the total runoff volume. An estimate of the EMC is typically obtained from the analytical results of flow-weighted composite samples collected during a runoff event. Discrete grab water samples are collected throughout the duration of the runoff event and combined into a single composite sample based on the proportion of the total flow volume represented by each sample. The composite sample is sent to the laboratories for analysis with the results representing the EMC. In cases where no flow data is available, for example due to equipment malfunction, the event composite sample is prepared and analyzed, and EMC concentrations are calculated strictly from that sample. The flow-weighted composite calculations for each site and sampling event are included in Appendix C.

Composite samples cannot be developed for fecal coliform and E. coli bacteria samples due to the high potential for sample contamination. Each discrete grab sample is analyzed individually. The results are mathematically combined into a single value representing the EMC based on the proportion of the total flow volume represented by each grab sample. Individual results of the grab samples and calculations of the flow weighted bacteria EMC values based on the grab samples are included in Appendix $\mathbf{D}$.

A few of the analytical results indicate that measurements were less than the value which can be routinely detected and reported by a laboratory. These "non-detected" results are indicated with a "less than" (<) symbol preceding the number. This value is known as the practical quantification limit (PQL). When a result is below the PQL, the PQL is used to determine the average value. For example, samples were collected from MH-1A during Quarters 2,3 and 4 (Table 6). The orthophosphate values determined from the flow-weighted composite samples were $0.06 \mathrm{mg} / \mathrm{l},<0.05 \mathrm{mg} / 1$, and $<0.05 \mathrm{mg} / \mathrm{l}$, respectively. These values are considered to be an EMC for orthophosphate for each event. The annual average (mean) of these values was determined by averaging $0.06,0.05$, and 0.05 to get $0.05 \mathrm{mg} / \mathrm{l}$, which is the annual mean orthophosphate EMC for MH-1A in 2012.

## Comparison of 2012 Wet Weather Monitoring Data

## Evaluation of 2012 Columbus Monitoring Data

Table 11, also found in Appendix B, compares the average quarterly values of EMCs generated in 2012. Comparison of the 2012 data and average EMCs reveal the following observations:

* Concentrations of individual parameters varied by site and event as found in the results from the previous five years.
- Concentrations at the industrial land use location (MH-03) are often higher than other sampling locations for all quarters sampled in 2012, especially for total metals, oxygen demand, and TSS.
* Average concentrations of total metals at the high density residential land use location (MH-4B) are often higher than the other two residential sampling locations (MH-1A and MH05) in 2012, especially for lead and zinc.
* Zinc concentrations are generally higher than all other metals at all sampling locations throughout 2012.
* With exception of elevated COD values at MH-4B, CBOD, BOD and COD values are comparable at MH-1A, MH-02, MH-4B, and MH-05 during 2012.


## Evaluation of 2007-2012 Columbus Monitoring Data

Table 12, also found in Appendix B, illustrates the Program's average annual EMC values for each parameter at each sampling location. Evaluation of this data reveals a few primary observations; these include:

* Water quality levels vary from event to event, site to site and year to year as demonstrated by the variation in mean values. This is a common trend in stormwater due to range of outside and local factors that can impact water quality such as precipitation, air quality, and local maintenance practices.
- MH-03 generally has the highest average values for a majority of the parameters (BOD, COD, alkalinity, $0 \& G$, hardness, nutrients, solids, and total metals) during all six years. With exception of MH-03, the other four sampling locations have average values generally within the same order of magnitude during all six years.
- Average oil \& grease values at MH-02 (commercial land-use) and MH-03 (industrial land-use) are higher than those for residential land-uses.
* The average total recoverable metal values at MH-1A are slightly higher, but within the same order of magnitude of previous years.
- The comparison of average values over the past six years indicates the water quality remained relatively consistent (i.e., the average values did not significantly increase or decrease) at any one site.


## Comparison of Columbus Monitoring Data to NSQD Values

National Stormwater Quality Database (NSQD) Version 3 was compared to the sampling results obtained from the five City of Columbus sampling locations to identify similarities and differences. NSQD includes a total of 8,602 rain events from 104 cities throughout the continental United States. A copy of the Version 3 database can be found at:
http://rpitt.eng.ua.edu/Research/ms4/mainms4.shtml.
The comparison between the City's data and NSQD was performed by creating box and whisker plots of the NSQD records. Box and whisker plots provide a graphical representation of data distribution by displaying the minimum, median, maximum, $25^{\text {th }}$ percentile, and $75^{\text {th }}$ percentile values for a given set of data. Figure 2, below, illustrates how to interpret the elements shown in box and whisker plots.


Figure 2-Box and Whisker Plot Interpretation
Box and whisker plots of the NSQD records were created for 14 parameters of interest, which included BOD $_{5}$, COD, TSS, total phosphorus, ammonia, fecal coliform, hardness, oil \& grease, and total metals ( $\mathrm{Cd}, \mathrm{Cr}, \mathrm{Cu}, \mathrm{Pb}, \mathrm{Ni}$, and Zn ). Added to each plot were the City's quarterly EMC 2012 sampling data, along with the mean and median values of the City's combined 2007 through 2012 data.

Each of the five sampling locations was matched to a subset of the NSQD record set representing the same land use category. Each sampling location has been classified by land use, as described previously, and again summarized in Table 13, below.

Table 13 - Land Use Designation of Sampling Sites

| Sampling Site | Land Use |
| :--- | :--- |
| MH-1A | Medium-Density Residential |
| MH-02 | Commercial |
| MH-03 | Industrial |
| MH-4B | High-Density Residential |
| MH-05 | Multi-Family Residential |

The 2012 City sampling values, and six-year program means, at all sampling locations are generally consistent with the NSQD data ranges represented by the box and whisker plots in Appendix E. There are a few exceptions:

- The bacteria EMC values (fecal coliform) are generally higher than national medians, and individual records are, at times, greater than an order of magnitude in deviation of the NSQD median at all five locations.
- EMC values for BOD $_{5}$, COD, hardness, oil and grease, TSS, cadmium, copper, lead, and zinc at the industrial location (MH-03) are greater than the NSQD 75th percentile.
- Mean EMC values for fecal coliform, hardness, and lead at the high density residential location (MH-4B) are generally greater than the NSQD 75th percentile.
* Mean EMC values for hardness are at or higher than the NSQD $75^{\text {th }}$ percentile at all sampling locations.
- With exception of MH-03, the six-year mean and median concentrations at all other land-use locations for total cadmium are less than the NSQD 25th percentile.
* The six-year mean and median concentrations for total recoverable metals are generally within the middle 50 percentile at all residential land use locations ( $\mathrm{MH}-1 \mathrm{~A}, \mathrm{MH}-4 \mathrm{~B}$, and $\mathrm{MH}-05$ ).
" The six-year mean concentrations for hardness and fecal coliform are near or greater than the NSQD 75th percentile for all land uses.

Not all parameters are represented in the box and whisker plots shown in Appendix D. E. coli, CBOD ${ }_{5}$, Alkalinity, cyanide, orthophosphate, and nitrite are not included in the comparisons because less than 100 events were available within the NSQD.

## Trend Analysis of Monitoring Data

Following completion of the initial five-year permit term (OEPA Permit No. 4PI00000*BD), the MannKendall trend analysis test was used to evaluate the probability of trends for the 20 analytes sampled quarterly at the five sites from 2007-2011. For a majority of the parameters, there was a wide range of variability in the EMC values from year to year and from site to site. No significant or high probabilities of increasing or decreasing trends were found in 92 of the 100 combinations ( 20 analytes multiplied by five sites). The water quality at the five sites remained relatively consistent from 2007-2011. For a detailed summary of this evaluation, reference the 2011 NPDES Stormwater Sampling Summary - Five City-Owned Outfalls dated March 7, 2012.

As suggested in the preceding review of the 2012 Columbus monitoring data, little has changed in the stormwater quality of the five sampling sites. For example, average values of each parameter have not increased or decreased significantly over the past year; also, sites with above average (as compared to NSQD data) total metals or oxygen demand levels continued to be within the same order of magnitude as previous years. For these reasons, no trend analysis of data was performed following the 2012 monitoring effort.

## Conclusions

Samples were collected and evaluated in a manner consistent with the QAPP established for this program, indicating that the program is yielding quality data useful in establishing a dependable database of stormwater measurements for future interpretation. On an annual basis, the reported lab data are evaluated with regard to plausibility, significant digits, and practical quantification limits. Each record is validated to assure that any laboratory, analytical, or field collection errors have been identified. Any records that are questionable have been reviewed prior to development of this report. Additionally, any records found to be inaccurate or false have been flagged (with explanation.)

EMC values from the only industrial land-use site (MH-03) throughout the program are generally higher than the values reported at other sites in the City, and generally higher than the median values in the NSQD. Based on previous land-use, it is suspected that some of the elevated constituents are generated by sources other than stormwater runoff. EMC values from the high density residential site (MH-4B) are generally higher than the values reported at the other two residential (medium density and multi-family) sites in the City. All other parameters have EMC values generally within the same order of magnitude of national medians for all sampling locations. These conclusions are generally consistent throughout each individual Program year.

## Appendix A

## Rain Event Hydrographs

## Sawbury

Junc 2012








## Clarendon

29 Junc 2012



Appendix A_Rain Event Hydrographs.pdf


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## Sawbury Boulevard

Quarter 3-2012


## Sawbury Boulevard

08 Scptember 2012


## Sawmill Place Boulevard

Quarter 3-2012



Joyce - 2150
Quarter 3-2012



## Clarendon Avenue

Quarter 3-2012


Clarendon Avenue
08 September 2012


## Petzinger Road

Quarter 3-2012


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## Sawbury Boulevard

Quarter 4-2012


## Sawbury Boulevard

12 November 2012


## Sawmill Place Boulevard

Quarter 4-2012


Sawmill Place Boulevard
Quarter 4-2012


Joyce - 2150
Quarter 4-2012



## Clarendon Avenue

Quarter 4-2012


## Clarendon Avenue

Quarter 4-2012


## Petzinger Road

Quarter 4-2012



## Appendix B

## Tables 6-12

Table 6
MH-1A (Sawbury Blvd \& Warrington Way) Summary of Results
Residential Land Use

| Parameter | Units | Site and Storm Event |  |  | EMC (Event Mean Concentration) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MH-1A | MH-1A | $\mathrm{MH}-1 \mathrm{~A}$ | N | Mean (2) | Maximum | Minimum |
|  |  | 06/29/12 | 09/08/12 | 11/12/12 |  |  |  |  |
| BACTERIA |  |  |  |  |  |  |  |  |
| Fecal Coliform | \#/100mi | 493,134 | 114,953 | 16,525 ${ }^{1}$ | 3 | 208,171 | 493,135 | 16,525 |
| E.coli | \#/100mi | 36,173 | 23,731 | 8,425 | 3 | 22,777 | 36,177 | 8,425 |
| OTHER |  |  |  |  |  |  |  |  |
| $\mathrm{CBOD}_{5}$ | $\mathrm{mg} / 1$ | 26.80 | 4.90 | 10.70 | 3 | 14.13 | 26.80 | 4.90 |
| $\mathrm{BOD}_{5}$ | $\mathrm{mg} / \mathrm{l}$ | 31.30 | 6.10 | 11.00 | 3 | 16.13 | 31.30 | 6.10 |
| COD | $\mathrm{mg} / \mathrm{l}$ | 81.40 | 17.20 | 49.00 | 3 | 49.20 | 81.40 | 17.20 |
| Alkalinity | mg/l | 1.70 | 23.00 | 46.00 | 3 | 23.57 | 46.00 | 1.70 |
| Oil \& Grease | $\mathrm{mg} / 1$ | 3.70 | 1.90 | $<1.00$ | 3 | 2.20 | 3.70 | 1.00 |
| Cyanide, Total | $\mu \mathrm{g} / \mathrm{L}$ | $<5.50$ | $<5.50$ | $<5.5$ | 3 | 5.50 | 5.50 | 5.50 |
| Hardness | $\mathrm{mg} / \mathrm{L}$ | 22.00 | 34.00 | 68.00 | 3 | 41.33 | 68.00 | 22.00 |
| NUTRIENTS |  |  |  |  |  |  |  |  |
| Orthophosphate | $\mathrm{mg} / \mathrm{L}$ | 0.06 | $<0.05$ | <0.050 | 3 | 0.06 | 0.06 | 0.05 |
| Total Phosphorus | $\mathrm{mg} / \mathrm{L}$ | 0.34 | 0.12 | 0.23 | 3 | 0.23 | 0.34 | 0.12 |
| Ammonia | $\mathrm{mg} / \mathrm{L}$ | 0.62 | 0.20 | 0.15 | 3 | 0.32 | 0.62 | 0.15 |
| Nitrite | $\mathrm{mg} / \mathrm{l}$ | <0.05 | <0.05 | <0.050 | 3 | 0.05 | 0.05 | 0.05 |
| SOLIDS |  |  |  |  |  |  |  |  |
| TSS | $\mathrm{mg} / \mathrm{L}$ | <10 | 7.50 | 9.80 | 3 | 9.10 | 10.00 | 7.50 |
| TOTAL RECOVERABLE METALS |  |  |  |  |  |  |  |  |
| Cadmium (Cd) | $\mu \mathrm{g} / \mathrm{L}$ | $<0.0084$ | 0.03 | $<0.017$ | 3 | 0.02 | 0.03 | 0.01 |
| Chromium (Cr) | $\mu \mathrm{g} / \mathrm{L}$ | 2.40 | 0.76 | 2.00 | 3 | 1.72 | 2.40 | 0.76 |
| Copper (Cu) | $\mu \mathrm{g} / \mathrm{L}$ | 10.00 | 5.20 | 10.80 | 3 | 8.67 | 10.80 | 5.20 |
| Lead (Pb) | $\mu \mathrm{g} / \mathrm{L}$ | 0.59 | 0.66 | 0.86 | 3 | 0.70 | 0.86 | 0.59 |
| Nickel (Ni) | $\mu \mathrm{g} / \mathrm{L}$ | 1.20 | 1.20 | 1.70 | 3 | 1.37 | 1.70 | 1.20 |
| Zinc ( Zn ) | $\mu \mathrm{g} / \mathrm{L}$ | 19.00 | 22.50 | 41.10 | 3 | 27.53 | 41.10 | 19.00 |

(1) No flow data available due to sensor malfunction, composite calculated from the arithmetic mean.
(2) The PQL will be used to determine the mean value as necessary.

Table 7
MH-02 (Sawmill Place Blvd \& Bent Tree Blvd) Summary of Results
Commerical Land Use

| Parameter | Units | Site and Storm Event |  |  | EMC (Event Mean Concentration) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MH-02 | MH-02 | MH-02 | N | Mean (2) | Maximum | Minimum |
|  |  | 06/29/12 | 09/08/12 | 12/02/12 |  |  |  |  |
| BACTERIA |  |  |  |  |  |  |  |  |
| Fecal Coliform | \#/100ml | 223,900 | 170,899 | 5,892 | 3 | 133,545 | 223,916 | 5,893 |
| E.coli | \#/100mi | 20,189 | 31,729 | 2,722 | 3 | 18,209 | 31,717 | 2,721 |
|  |  |  |  |  |  |  |  |  |
| $\mathrm{CBOD}_{5}$ | $\mathrm{mg} / \mathrm{l}$ | 7.30 | 5.30 | 9.60 | 3 | 7.40 | 9.60 | 5.30 |
| $\mathrm{BOD}_{5}$ | $\mathrm{mg} / 1$ | 8.30 | 5.70 | 11.10 | 3 | 8.37 | 11.10 | 5.70 |
| COD | $\mathrm{mg} / \mathrm{l}$ | 44.40 | 19.40 | 39.00 | 3 | 34.27 | 44.40 | 19.40 |
| Alkalinity | $\mathrm{mg} / 1$ | 44.00 | 25.00 | 29.00 | 3 | 32.67 | 44.00 | 25.00 |
| Oil \& Grease | $\mathrm{mg} / \mathrm{l}$ | 2.60 | $<1.00$ | 1.20 | 3 | 1.60 | 2.60 | 1.00 |
| Cyanide, Total | $\mu \mathrm{g} / \mathrm{L}$ | <5.50 | <5.50 | <5.5 | 3 | 5.50 | 5.50 | 5.50 |
| Hardness | mg/L | 120.00 | 41.00 | 52.00 | 3 | 71.00 | 120.00 | 41.00 |
| NUTRIENTS |  |  |  |  |  |  |  |  |
| Orthophosphate | mg/L | <0.05 | <0.05 | $<0.050$ | 3 | 0.05 | 0.05 | 0.05 |
| Total Phosphorus | $\mathrm{mg} / \mathrm{L}$ | 0.26 | 0.08 | 0.15 | 3 | 0.16 | 0.26 | 0.08 |
| Ammonia | mg/L | 0.54 | 0.21 | 0.30 | 3 | 0.35 | 0.54 | 0.21 |
| Nitrite | mg/l | $<0.05$ | $<0.05$ | $<0.050$ | 3 | 0.05 | 0.05 | 0.05 |
| SOLIDS |  |  |  |  |  |  |  |  |
| TSS | mg/L | <10 | $<5.0$ | 15.00 | 3 | 10.00 | 15.00 | 5.00 |
| TOTAL RECOVERABLE METALS |  |  |  |  |  |  |  |  |
| Cadmium (Cd) | $\mu \mathrm{g} / \mathrm{L}$ | <0.0084 | 0.02 | 0.04 | 3 | 0.02 | 0.04 | 0.01 |
| Chromium (Cr) | $\mu \mathrm{g} / \mathrm{L}$ | 2.60 | 1.20 | 1.30 | 3 | 1.70 | 2.60 | 1.20 |
| Copper (Cu) | $\mu \mathrm{g} / \mathrm{L}$ | 7.20 | 2.80 | 6.50 | 3 | 5.50 | 7.20 | 2.80 |
| Lead (Pb) | $\mu \mathrm{g} / \mathrm{L}$ | 0.86 | <0.52 | 1.20 | 3 | 0.86 | 1.20 | 0.52 |
| Nickel ( Ni ) | $\mu \mathrm{g} / \mathrm{L}$ | 5.40 | 4.30 | 1.90 | 3 | 3.87 | 5.40 | 1.90 |
| Zinc ( Zn ) | $\mu \mathrm{g} / \mathrm{L}$ | 63.00 | 26.10 | 57.50 | 3 | 48.87 | 63.00 | 26.10 |

(1) No flow data available due to sensor malfunction, event composite sample prepared and analyzed.
(2) The PQL will be used to determine the mean value as necessary.

Table 8
MH-03 Joyce Ave \& Windsor Ave) Summary of Results
Industrial Land Use

|  |  | Site and Storm Event |  |  | EMC (Event Mean Concentration) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parameter | Units | MH-03 | MH-03 | MH-03 | N | Mean (2) | Maximum | Minimum |
|  |  | 06/29/12 | 09/07/12 | 11/12/12 |  |  |  |  |
| BACTERIA |  |  |  |  |  |  |  |  |
| Fecal Coliform | \#/100ml | 195,714 | 508,198 | 33,668 ${ }^{1}$ | 3 | 245,849 | 508,170 | 33,664 |
| E.colĭ | \#100ml | 25,714 | 115,284 | 2,905 | 3 | 47,971 | 115,294 | 2,904 |
| OTHER |  |  |  |  |  |  |  |  |
| $\mathrm{CBOD}_{5}$ | mg/l | 22.90 | 23.70 | 20.20 | 3 | 22.27 | 23.70 | 20.20 |
| $\mathrm{BOD}_{5}$ | $\mathrm{mg} / 1$ | 32.80 | 35.20 | 22.00 | 3 | 30.00 | 35.20 | 22.00 |
| COD | mg/l | 157.00 | 356.00 | 244.00 | 3 | 252.33 | 356.00 | 157.00 |
| Alkalinity | $\mathrm{mg} / \mathrm{l}$ | 70.00 | 360.00 | 180.00 | 3 | 203.33 | 360.00 | 70.00 |
| Oil \& Grease | $\mathrm{mg} / 1$ | 9.60 | 8.80 | 10.00 | 3 | 9.47 | 10.00 | 8.80 |
| Cyanide, Total | $\mu \mathrm{g} / \mathrm{L}$ | $<5.50$ | $<5.50$ | $<5.5$ | 3 | 5.50 | 5.50 | 5.50 |
| Hardness | mg/L | 200.00 | 490.00 | 240.00 | 3 | 310.00 | 490.00 | 200.00 |
| NUTRIENTS |  |  |  |  |  |  |  |  |
| Orthophosphate | $\mathrm{mg} / \mathrm{L}$ | 0.05 | $<0.05$ | 0.08 | 3 | 0.06 | 0.08 | 0.05 |
| Total Phosphorus | $\mathrm{mg} / \mathrm{L}$ | 0.48 | 0.64 | 0.50 | 3 | 0.54 | 0.64 | 0.48 |
| Ammonia | $\mathrm{mg} / \mathrm{L}$ | 0.62 | 0.47 | 0.18 | 3 | 0.42 | 0.62 | 0.18 |
| Nitrite | $\mathrm{mg} / \mathrm{l}$ | 0.05 | 0.05 | 0.05 | 3 | 0.05 | 0.05 | 0.05 |
| SOLIDS |  |  |  |  |  |  |  |  |
| TSS | mg/L | 220.00 | 660.00 | 390.00 | 3 | 423.33 | 660.00 | 220.00 |
| TOTAL RECOVERABLE METALS |  |  |  |  |  |  |  |  |
| Cadmium (Cd) | $\mu \mathrm{g} / \mathrm{L}$ | 3.90 | 9.40 | 4.60 | 3 | 5.97 | 9.40 | 3.90 |
| Chromium (Cr) | $\mu \mathrm{g} / \mathrm{L}$ | 15.70 | 17.70 | 17.00 | 3 | 16.80 | 17.70 | 15.70 |
| Copper (Cu) | $\mu \mathrm{g} / \mathrm{L}$ | 86.10 | 129.00 | 99.70 | 3 | 104.93 | 129.00 | 86.10 |
| Lead (Pb) | $\mu \mathrm{g} / \mathrm{L}$ | 67.10 | 140.00 | 89.20 | 3 | 98.77 | 140.00 | 67.10 |
| Nickel (Ni) | $\mu \mathrm{g} / \mathrm{L}$ | 15.90 | 26.30 | 15.90 | 3 | 19.37 | 26.30 | 15.90 |
| Zinc ( Zn ) | $\mu \mathrm{g} / \mathrm{L}$ | 660.00 | 1760.00 | 804.00 | 3 | 1074.67 | 1760.00 | 660.00 |

(1) No flow data available due to sensor malfunction, composite calculated from the arithmetic mean.
(2) The PQL will be used to determine the mean value as necessary.

Table 9
MH-4B (Clarendon Ave \& Alley South of Fairfield Place) Summary of Results
High Density Residential Land Use

| Parameter | Units | Site and Storm Event |  |  | EMC (Event Mean Concentration) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MH-4B | MH-4B | MH-4B | N | Mean (2) | Maximum | Minimum |
|  |  | 06/29/12 | 09/08/12 | 11/12/12 |  |  |  |  |
| BACTERIA |  |  |  |  |  |  |  |  |
| Fecal Coliform | \#/100ml | 577,080 | 592,683 | 46,114 | 3 | 405,299 | 592,688 | 46,116 |
| E.coli | \#/100ml | 577,080 | 293,193 | 21,131 | 3 | 297,139 | 577,092 | 21,131 |
| OTHER |  |  |  |  |  |  |  |  |
| $\mathrm{CBOD}_{5}$ | $\mathrm{mg} / \mathrm{l}$ | 39.50 | 7.50 | 45.20 | 3 | 30.73 | 45.20 | 7.50 |
| $\mathrm{BOD}_{5}$ | $\mathrm{mg} / 1$ | 43.90 | 9.20 | 48.20 | 3 | 33.77 | 48.20 | 9.20 |
| COD | $\mathrm{mg} / \mathrm{l}$ | 127.00 | 33.40 | 132.00 | 3 | 97.47 | 132.00 | 33.40 |
| Alkalinity | mg/l | 44.00 | 42.00 | 54.00 | 3 | 46.67 | 54.00 | 42.00 |
| Oil \& Grease | mg/l | 2.70 | $<1.0$ | 1.30 | 3 | 2.00 | 2.70 | 1.30 |
| Cyanide, Total | $\mu \mathrm{g} / \mathrm{L}$ | 8.70 | $<5.50$ | <5.5 | 3 | 6.57 | 8.70 | 5.50 |
| Hardness | $\mathrm{mg} / \mathrm{L}$ | 84.00 | 68.00 | 70.00 | 3 | 74.00 | 84.00 | 68.00 |
| NUTRIENTS |  |  |  |  |  |  |  |  |
| Orthophosphate | mg/L | 0.16 | <0.05 | 0.25 | 3 | 0.15 | 0.25 | 0.05 |
| Total Phosphorus | $\mathrm{mg} / \mathrm{L}$ | 0.53 | 0.28 | 0.60 | 3 | 0.47 | 0.60 | 0.28 |
| Ammonia | $\mathrm{mg} / \mathrm{L}$ | 0.94 | 0.22 | 0.28 | 3 | 0.48 | 0.94 | 0.22 |
| Nitrite | $\mathrm{mg} / \mathrm{l}$ | 0.08 | $<0.05$ | <0.050 | 3 | 0.07 | 0.08 | 0.05 |
| SOLIDS |  |  |  |  |  |  |  |  |
| TSS | $\mathrm{mg} / \mathrm{L}$ | 110.00 | 110.00 | 30.00 | 3 | 83.33 | 110.00 | 30.00 |
| TOTAL RECOVERABLE METALS |  |  |  |  |  |  |  |  |
| Cadmium (Cd) | $\mu \mathrm{g} / \mathrm{L}$ | 0.15 | 0.12 | 0.09 | 3 | 0.12 | 0.15 | 0.09 |
| Chromium (Cr) | $\mu \mathrm{g} / \mathrm{L}$ | 2.30 | 1.10 | 2.70 | 3 | 2.03 | 2.70 | 1.10 |
| Copper (Cu) | $\mu \mathrm{g} / \mathrm{L}$ | 14.70 | 7.70 | 12.40 | 3 | 11.60 | 14.70 | 7.70 |
| Lead (Pb) | $\mu \mathrm{g} / \mathrm{L}$ | 20.40 | 15.00 | 9.00 | 3 | 14.80 | 20.40 | 9.00 |
| Nickel (Ni) | $\mu \mathrm{g} / \mathrm{L}$ | 4.00 | 2.60 | 3.10 | 3 | 3.23 | 4.00 | 2.60 |
| Zinc (Zn) | $\mu \mathrm{g} / \mathrm{L}$ | 90.00 | 49.50 | 62.20 | 3 | 67.23 | 90.00 | 49.50 |

(1) No flow data available due to sensor malfunction, event composite sample prepared and analyzed.
(2) The PQL will be used to determine the mean value as necessary.

Table 10
MH-05 (Petzinger Rd \& Courtright Rd) Summary of Results
Multi-Family Residential Land Use

| Parameter | Units | Site and Storm Event |  |  | EMC (Event Mean Concentration) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MH-05 | MH-05 | MH-05 | N | Mean (2) | Maximum | Minimum |
|  |  | 06/29/12 | 09/08/12 | 11/12/12 |  |  |  |  |
| BACTERIA |  |  |  |  |  |  |  |  |
| Fecal Coliform | \#/100mi | 430,707 | 322,032 | 305,380 | 3 | 352,696 | 430,714 | 305,344 |
| E.coli | \#/100mi | 19,021 | 49,325 | 52,441 | 3 | 40,260 | 52,436 | 19,021 |
| OTHER |  |  |  |  |  |  |  |  |
| $\mathrm{CBOD}_{5}$ | mg/l | 11.00 | 6.80 | 14.20 | 3 | 10.67 | 14.20 | 6.80 |
| $\mathrm{BOD}_{5}$ | $\mathrm{mg} / \mathrm{l}$ | 12.20 | 7.80 | 19.60 | 3 | 13.20 | 19.60 | 7.80 |
| COD | $\mathrm{mg} / \mathrm{l}$ | 60.70 | <10.0 | 73.30 | 3 | 48.00 | 73.30 | 10.00 |
| Alkalinity | $\mathrm{mg} / \mathrm{l}$ | 22.00 | 25.00 | 42.00 | 3 | 29.67 | 42.00 | 22.00 |
| Oil \& Grease | mg/ | 3.20 | $<1.0$ | 2.00 | 3 | 2.07 | 3.20 | 1.00 |
| Cyanide, Total | $\mu \mathrm{g} / \mathrm{L}$ | 6.70 | $<5.50$ | <5.5 | 3 | 5.90 | 6.70 | 5.50 |
| Hardness | mg/L | 63.00 | 44.00 | 59.00 | 3 | 55.33 | 63.00 | 44.00 |
| NUTRIENTS |  |  |  |  |  |  |  |  |
| Orthophosphate | $\mathrm{mg} / \mathrm{L}$ | 0.06 | <0.05 | <0.050 | 3 | 0.05 | 0.06 | 0.05 |
| Total Phosphorus | $\mathrm{mg} / \mathrm{L}$ | 0.35 | 0.15 | 0.27 | 3 | 0.26 | 0.35 | 0.15 |
| Ammonia | $\mathrm{mg} / \mathrm{L}$ | 0.64 | 0.18 | 0.15 | 3 | 0.32 | 0.64 | 0.15 |
| Nitrite | $\mathrm{mg} / \mathrm{l}$ | <0.05 | <0.05 | <0.050 | 3 | 0.05 | 0.05 | 0.05 |
| SOLIDS |  |  |  |  |  |  |  |  |
| TSS | mg/L | 53.00 | 28.00 | 52.00 | 3 | 44.33 | 53.00 | 28.00 |
| TOTAL RECOVERABLE METALS |  |  |  |  |  |  |  |  |
| Cadmium (Cd) | $\mu \mathrm{g} / \mathrm{L}$ | 0.07 | 0.05 | 0.07 | 3 | 0.06 | 0.07 | 0.05 |
| Chromium (Cr) | $\mu \mathrm{g} / \mathrm{L}$ | 2.90 | 1.80 | 2.40 | 3 | 2.37 | 2.90 | 1.80 |
| Copper (Cu) | $\mu \mathrm{g} / \mathrm{L}$ | 10.40 | 6.10 | 9.50 | 3 | 8.67 | 10.40 | 6.10 |
| Lead (Pb) | $\mu \mathrm{g} / \mathrm{L}$ | 3.60 | 2.00 | 3.50 | 3 | 3.03 | 3.60 | 2.00 |
| Nickel (Ni) | $\mu \mathrm{g} / \mathrm{L}$ | 2.40 | 1.80 | 2.40 | 3 | 2.20 | 2.40 | 1.80 |
| Zinc (Zn) | $\mu \mathrm{g} / \mathrm{L}$ | 43.00 | 31.40 | 54.50 | 3 | 42.97 | 54.50 | 31.40 |
| (1) No flow data available due to sensor malfunction, event composite sample prepared and analyzed. (2) The PQL will be used to determine the mean value as necessary. |  |  |  |  |  |  |  |  |

Table 11
Summary of Average 2012 Event Mean Concentrations (EMC)

| Parameter | Units | Site |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MH-1A | MH-02 | MH-03 | MH-4B | MH-05 |
|  |  | Medium Density Residential | Commercial | Industrial | High Density Residential | Multi-family Residential |
| BACTERIA |  |  |  |  |  |  |
| Fecal Coliform | \#/100mi | 208,171 | 133,545 | 245,849 | 405,299 | 352,696 |
| E.coli | \#/100ml | 22,777 | 18,209 | 47,971 | 297,139 | 40,260 |
|  |  |  |  |  |  |  |
| $\mathrm{CBOD}_{5}$ | $\mathrm{mg} / \mathrm{l}$ | 14.13 | 7.40 | 22.27 | 30.73 | 10.67 |
| $\mathrm{BOD}_{5}{ }^{\text {* }}$ | $\mathrm{mg} / \mathrm{l}$ | 16.13 | 8.37 | 30.00 | 33.77 | 13.20 |
| COD | $\mathrm{mg} / \mathrm{l}$ | 49.20 | 34.27 | 252.33 | 97.47 | 48.00 |
| Alkalinity | $\mathrm{mg} / \mathrm{l}$ | 23.57 | 32.67 | 203.33 | 46.67 | 29.67 |
| Oil \& Grease* | mg/l | 2.20 | 1.60 | 9.47 | 2.00 | 2.07 |
| Cyanide, Total ${ }^{*}$ | $\mu \mathrm{g} / \mathrm{L}$ | 5.50 | 5.50 | 5.50 | 6.57 | 5.90 |
| Hardness | $\mathrm{mg} / \mathrm{L}$ | 41.33 | 71.00 | 310.00 | 74.00 | 55.33 |
| NUTRIENTS |  |  |  |  |  |  |
| Orthophosphate* | mg/L | 0.06 | 0.05 | 0.06 | 0.15 | 0.05 |
| Total Phosphorus* | $\mathrm{mg} / \mathrm{L}$ | 0.23 | 0.16 | 0.54 | 0.47 | 0.26 |
| Ammonia* | $\mathrm{mg} / \mathrm{L}$ | 0.32 | 0.35 | 0.42 | 0.48 | 0.32 |
| Nitrite* | $\mathrm{mg} / \mathrm{l}$ | 0.05 | 0.05 | 0.05 | 0.07 | 0.05 |
| SOLIDS |  |  |  |  |  |  |
| TSS* | mg/L | 9 | 10 | 423 | 83 | 44 |
|  |  |  |  |  |  |  |
| Cadmium (Cd)* | $\mu \mathrm{g} / \mathrm{L}$ | 0.02 | 0.02 | 5.97 | 0.12 | 0.06 |
| Chromium (Cr) | $\mu \mathrm{g} / \mathrm{L}$ | 1.72 | 1.70 | 16.80 | 2.03 | 2.37 |
| Copper (Cu) | $\mu \mathrm{g} / \mathrm{L}$ | 8.67 | 5.50 | 104.93 | 11.60 | 8.67 |
| Lead (Pb) | $\mu \mathrm{g} / \mathrm{L}$ | 0.70 | 0.86 | 98.77 | 14.80 | 3.03 |
| Nickel (Ni) | $\mu \mathrm{g} / \mathrm{L}$ | 1.37 | 3.87 | 19.37 | 3.23 | 2.20 |
| Zinc (Zn) | $\mu \mathrm{g} / \mathrm{L}$ | 27.53 | 48.87 | 1074.67 | 67.23 | 42.97 |
| * The PQL value was used for one or more quarterly measurements and therefore used to determine the mean value |  |  |  |  |  |  |


| Parameter | Units | Site |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | MH-1A |  |  |  |  |  |  | MH-02 |  |  |  |  |  |  | MH-03 |  |  |  |  |  |  | MH-4B |  |  |  |  |  |  | MH-05 |  |  |  |  |  |  |
|  |  | Medium Density Residential Land Use |  |  |  |  |  |  | Commercial Land Use |  |  |  |  |  |  | Industrial Land Use |  |  |  |  |  |  | High Density Residential Land Use |  |  |  |  |  |  | Mutt-family Residential Land Use |  |  |  |  |  |  |
|  |  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Mean | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Mean | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Mean | (1) | 2008 | 2009 | 2010 | 2011 | 2012 | Mean | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | Mean |
| BACTERIA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fecal Coliform | \#1100m\| | 29933 | 1872 | 1940 | 23729 | 1622 | 208171 | 44544 | 17347 | 1872 | 32039 | 7838 | 12708 | 133545 | 14361 | 36040 | 18453 | 3097 | 27803 | 14022 | 245849 | 21023 |  | 62241 | 22444 | 42709 | 3531 | 405299 | 32731 | 13565 | 7197 | 3645 | 43786 | 16988 | 352696 | 17036 |
| E.coli | \#1100m\| | 14733 | 1469 | 1322 | 15606 | 2720 | 2277 | 9771 | 14293 | 1469 | 24732 | 5339 | 8545 | 18209 | 10875 | 13078 | 15543 | 2548 | 20242 | 10336 | 47971 | 12852 |  | 52081 | 15145 | 30302 | 1967 | 297139 | 24874 | 6333 | 5349 | 2829 | 29738 | 12593 | 40260 | 11358 |
| OTHER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\mathrm{CBOD}_{5}$ | mg | 9.60 | 15.20 | 5.45 | 14.18 | 17.31 | 14.13 | 1264 | 8.47 | 9.95 | 4.70 | 8.63 | 5.48 | 7.40 | 7.44 | 8.53 | 19.40 | 19.25 | 3270 | 15.00 | 22.27 | 14.69 |  | 53.50 | 9.63 | 36.13 | 7.93 | 30.73 | 26.80 | 11.13 | 14.50 | 3.29 | 14.93 | 15.22 | 10.67 | 11.81 |
| $\mathrm{BOD}_{5}{ }^{\text {a }}$ | mgn | 10.87 | 25.23 | 20.29 | 16.70 | 4.80 | 16.13 | 15.67 | 10.97 | 11.20 | 6.78 | 10.25 | 6.13 | 8.37 | 9.06 | 12.68 | 30.95 | 24.03 | 35.13 | 15.50 | 30.00 | 18.47 |  | 59.50 | 12.38 | 40.90 | 8.73 | 33.77 | 30.38 | 11.38 | 2280 | 7.38 | 16.98 | 4.85 | 13.20 | 12.68 |
| COD | mgn | 36.24 | 73.70 | 27.54 | 58.80 | 18.41 | 49.20 | 43.98 | 50.53 | 59.84 | 36.99 | 49.12 | 45.42 | 34.27 | 48.38 | 211.23 | 307.05 | 205.70 | 237.34 | 183.76 | 252.33 | 174.40 |  | 181.51 | 39.20 | 193.32 | 47.76 | 97.47 | 115.45 | 90.21 | 69.40 | 43.95 | 83.40 | 22.27 | 48.00 | 61.85 |
| Akalinity | mgn | 95 | 47 | 33 | 61 | 81 | 24 | 57 | 56 | 34 | 46 | 40 | 51 | 33 | 45 | 129 | 179 | 200 | 125 | 143 | 203 | 122 |  | 56 | 50 | 76 | 67 | 47 | 62 | 58 | 81 | 49 | 52 | 117 | 30 | 71 |
| Oil \& Grease* | mg $n$ | 1.51 | 2.60 | 11.81 | 1.20 | 0.47 | 2.20 | 3.30 | 2.54 | 3.46 | 8.75 | 14.15 | 4.18 | 1.60 | 6.62 | 8.13 | 13.75 | 10.63 | 5.90 | 8.63 | 9.47 | 7.45 |  | 2.55 | 295 | 2.73 | 1.97 | 2.00 | 2.55 | 4.28 | 3.70 | 2.95 | 288 | 1.81 | 2.07 | 3.12 |
| Cyanide, Total ${ }^{\text {a }}$ | нgh | 3.83 | 4.20 | 14.40 | 3.35 | 1.58 | 5.50 | 5.48 | 4.87 | 5.63 | 5.90 | 3.50 | 0.86 | 5.50 | 4.15 | 3.93 | 6.75 | 5.50 | 6.50 | 1.06 | 5.50 | 4.55 |  | 4.20 | 4.28 | 4.45 | 0.88 | 6.57 | 3.45 | 3.16 | 4.20 | 4.20 | 3.23 | 0.67 | 5.90 | 3.09 |
| Hardness | mgh | 159 | 73 | 61 | 112 | 154 | 41 | 100 | 130 | 84 | 80 | 75 | 105 | 71 | 95 | 289 | 338 | 213 | 185 | 258 | 310 | 202 |  | 105 | 58 | 94 | 102 | 74 | 90 | 116 | 98 | 64 | 83 | 203 | 55 | 113 |
| NUTRIENTS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Orthophosphate* | moll | 0.13 | 0.16 | 0.10 | 0.08 | 0.06 | 0.06 | 0.10 | 0.07 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.08 | 0.15 | 0.06 | 0.08 | 0.06 | 0.08 |  | 0.65 | 0.11 | 0.24 | 0.06 | 0.15 | 0.26 | 0.10 | 0.13 | 0.08 | 0.06 | 0.05 | 0.05 | 0.08 |
| Total Phosphorss* | mell | 0.24 | 0.29 | 0.23 | 0.18 | 0.21 | 0.23 | 0.23 | 0.11 | 0.09 | 0.07 | 0.09 | 0.13 | 0.16 | 0.10 | 0.42 | 0.57 | 0.45 | 0.29 | 0.30 | 0.54 | 0.33 |  | 0.84 | 0.27 | 0.64 | 0.26 | 0.47 | 0.50 | 0.11 | 0.26 | 0.13 | 0.15 | 0.14 | 0.26 | 0.16 |
| Ammonia* | moll | 0.36 | 0.47 | 0.24 | 0.36 | 0.45 | 0.32 | 0.37 | 1.44 | 0.43 | 0.16 | 0.44 | 0.51 | 0.35 | 0.60 | 0.71 | 0.55 | 0.23 | 0.65 | 0.54 | 0.42 | 0.49 |  | 0.51 | 0.19 | 0.49 | 0.41 | 0.48 | 0.40 | 0.29 | 0.34 | 0.15 | 0.42 | 0.43 | 0.32 | 0.32 |
| Nitrite** | mgn | 0.06 | 0.06 | 0.05 | 0.09 | 0.05 | 0.05 | 0.06 | 0.06 | 0.07 | 0.05 | 0.11 | 0.06 | 0.05 | 0.07 | 0.05 | 0.09 | 0.11 | 0.06 | 0.06 | 0.05 | 0.07 |  | 0.08 | 0.05 | 0.11 | 0.05 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | 0.09 | 0.05 | 0.05 | 0.06 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| TSS ${ }^{\text {+ }}$ | mgh | 22 | 23 | 17 | 46 | 15 | 9 | 22 | 21 | 27 | 15 | 26 | 22 | 10 | 22 | 244 | 443 | 355 | 181 | 180 | 423 | 211 |  | 49 | 59 | 104 | 24 | 83 | 59 | 54 | 41 | 57 | 54 | 15 | 44 | 44 |
| TOTAL RECOVERABLE METALS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cadmium (Cd)* | \%g/L | 0.10 | 0.03 | 0.05 | 0.07 | 0.05 | 0.02 | 0.05 | 0.08 | 0.09 | 0.04 | 0.06 | 0.11 | 0.02 | 0.08 | 5.09 | 5.57 | 4.96 | 4.30 | 5.48 | 5.97 | 3.65 |  | 0.22 | 0.13 | 0.22 | 0.12 | 0.12 | 0.17 | 0.16 | 0.09 | 0.06 | 0.13 | 0.08 | 0.06 | 0.10 |
| Chromium (C, | $\mu \mathrm{gh}$ / | 0.85 | 1.40 | 1.35 | 1.88 | 1.05 | 1.72 | 1.37 | 3.81 | 2.68 | 2.78 | 3.05 | 2.30 | 1.70 | 2.92 | 12.23 | 8.58 | 15.85 | 14.07 | 7.98 | 16.80 | 8.65 |  | 1.85 | 1.75 | 3.08 | 207 | 2.03 | 219 | 1.72 | 1.63 | 2.10 | 2.28 | 1.29 | 237 | 1.80 |
| Copper (Cu) | Mol | 17.82 | 15.78 | 9.70 | 16.90 | 6.63 | 8.67 | 12.58 | 8.66 | 8.98 | 5.12 | 7.83 | 7.48 | 5.50 | 7.61 | 118.28 | 79.55 | 83.78 | 76.43 | 66.85 | 104.93 | 62.52 |  | 12.55 | 8.15 | 17.28 | 8.43 | 11.60 | 11.60 | 11.48 | 12.16 | 6.79 | 12.78 | 6.55 | 8.67 | 9.95 |
| Lead (Pb) | mgh | 1.49 | 1.80 | 1.73 | 2.38 | 0.69 | 0.70 | 1.46 | 4.43 | 3.98 | 1.43 | 3.30 | 1.34 | 0.86 | 2.89 | 118.25 | 70.68 | 93.75 | 67.83 | 82.33 | 98.77 | 64.58 |  | 11.00 | 12.80 | 26.53 | 14.13 | 14.80 | 16.11 | 3.48 | 2.82 | 2.24 | 4.55 | 1.79 | 3.03 | 2.98 |
| Nickel (Ni) | $\mu \mathrm{g}$ / | 3.10 | 3.01 | 2.12 | 4.03 | 2.93 | 1.37 | 2.76 | 3.97 | 3.98 | 2.93 | 3.25 | 3.13 | 3.87 | 3.45 | 19.78 | 20.88 | 15.93 | 14.20 | 16.25 | 19.37 | 13.14 |  | 6.36 | 3.15 | 5.18 | 3.60 | 3.23 | 4.57 | 3.61 | 3.71 | 2.40 | 4.58 | 3.60 | 2.20 | 3.58 |
| Zinc (Zn) | $\mu \mathrm{g}$ / | 42.77 | 49.65 | 54.55 | 45.03 | 23.90 | 27.53 | 40.57 | 75.40 | 87.38 | 47.03 | 73.15 | 43.18 | 48.87 | 65.23 | 975.75 | 964.25 | 901.50 | 763.00 | 1137.50 | 1074.67 | 687.30 |  | 94.75 | 48.83 | 100.25 | 51.33 | 67.23 | 73.79 | 54.75 | 6248 | 32.90 | 55.20 | 21.08 | 4297 | 45.28 |
| * The PQL value was used for one or (1) Sampling location not ysed in 2007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Appendix C

Flow Data Composite Flow Calculations


|  | Site: | Saw | Place Bou | eard |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Time | Level (in.) | Velocity (fts) | Flow (mgd) | Volume, mgal (mgal) | Sample \# | Flow Volume, mgal Vq | Volume From Sample, Liters Vs $=$ Vq/Vqt * Vst | Vst, Liters |
| Hr. 0 | 6/29/2012 18:10 | 25.91 | 1.11 | 4.9120 | 0.017055556 |  |  |  | Vs1, liters |
|  | 6/29/2012 18:15 | 25.37 | 0.98 | 4.2240 | 0.014666667 |  |  |  |  |
|  | 6/29/2012 18:20 | 24.81 | 0.91 | 3.8140 | 0.013243056 | 1 | 0.04496528 | 1.470 |  |
|  | 6/29/2012 18:25 | 24.37 | 0.88 | 3.6060 | 0.012520833 |  |  |  |  |
| Hr. 0.25 | 6/29/2012 18:30 | 23.93 | 0.80 | 3.2030 | 0.011121528 |  |  |  | Vs2, liters |
|  | 6/29/2012 18:35 | 23.51 | 0.77 | 3.0140 | 0.010465278 | 2 | 0.03410764 | 1.115 |  |
|  | 6/29/2012 18:40 | 23.05 | 0.76 | 2.9000 | 0.010069444 |  |  |  |  |
| Hr. 0.50 | 6/29/2012 18:45 | 22.65 | 0.71 | 2.6490 | 0.009197917 |  |  |  | Vs3, liters |
|  | 6/29/2012 18:50 | 22.35 | 0.71 | 2.6040 | 0.009041667 |  |  | $\cdots$ |  |
|  | 6/29/2012 18:55 | 21.85 | 0.70 | 2.4930 | 0.008656250 | 3 | 0.03696528 | 1.209 |  |
|  | 6/29/2012 19:00 | 21.47 | 0.60 | 2.0880 | 0.007250000 |  |  |  |  |
|  | 6/29/2012 19:05 | 21.09 | 0.60 | 2.0400 | 0.007083333 |  |  |  |  |
|  | 6/29/2012 19:10 | 20.69 | 0.59 | 1.9560 | 0.006791667 |  |  |  |  |
| Hr. 1.0 | 6/29/2012 19:15 | 20.25 | 0.51 | 1.6440 | 0.005708333 |  |  |  | Vs4, liters |
|  | 6/29/2012 19:20 | 19.91 | 0.48 | 1.5120 | 0.005250000 |  |  |  |  |
|  | 6/29/2012 19:25 | 19.45 | 0.45 | 1.3750 | 0.004774306 | 4 | 0.03685764 | 1.205 |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 1.5 |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 5 | 0.00000000 | 0.000 | Vs5, liters |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 2.0 |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 6 | 0.00000000 | 0.000 | Vs6, liters |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 2.5 |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 7 | 0.00000000 | 0.000 | Vs7, liters |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 3.0 |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 8 | 0.00000000 | 0.000 | Vs8, liters |
|  |  | Total: |  |  |  |  |  |  |  |
|  |  |  |  |  | 0.152895833 | Vqt, mgal |  | 5.000 |  |



|  | Site: | Clarendon Avenue |  |  | Volume, mgal (mgal) | Sample \# | Flow Volume, mgal Vq | Volume From Sample, Liters$\mathrm{Vs}=\mathrm{Vq} / \mathrm{Vqt}^{*} \mathrm{Vst}$ | Vst, Liters$5.0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Time | Level <br> (in.) | Velocity (fts) | Flow (mgd) |  |  |  |  |  |
| Hr. 0 | 6/29/2012 17:20 | 0.15 | 0.16 | 0.0000 | 0.000000000 |  |  |  |  |
|  | 6/29/2012 17:25 | 5.47 | 1.17 | 0.4080 | 0.001416667 |  |  |  |  |
|  | 6/29/2012 17:30 | 9.41 | 2.26 | 1.6670 | 0.005788194 | 1 | 0.00720486 | 1.184 | Vs1, liters |
| Hr. 0.25 | 6/29/2012 17:35 | 8.49 | 1.72 | 1.1060 | 0.003840278 |  |  |  |  |
|  | 6/29/2012 17:40 | 6.97 | 1.76 | 0.8610 | 0.002989583 |  |  |  |  |
|  | 6/29/2012 17:45 | 5.70 | 1.55 | 0.5740 | 0.001993056 | 2 | 0.00882292 | 1.450 | Vs2, liters |
| Hr. 0.50 | 6/29/2012 17:50 | 4.81 | 1.46 | 0.4250 | 0.001475694 |  |  |  |  |
|  | 6/29/2012 17:55 | 4.05 | 1.38 | 0.3110 | 0.001079861 |  |  |  |  |
|  | 6/29/2012 18:00 | 3.51 | 1.21 | 0.2220 | 0.000770833 |  |  |  |  |
|  | 6/29/2012 18:05 | 3.09 | 1.19 | 0.1810 | 0.000628472 | 3 | 0.00395486 | 0.650 | Vs3, liters |
| Hr. 1.0 | 6/29/2012 18:10 | 2.75 | 1.07 | 0.1380 | 0.000479167 |  |  |  |  |
|  | 6/29/2012 18:15 | 2.52 | 1.02 | 0.1150 | 0.000399306 |  |  |  |  |
|  | 6/29/2012 18:20 | 2.42 | 0.97 | 0.1040 | 0.000361111 |  |  |  |  |
|  | 6/29/2012 18:25 | 2.43 | 0.96 | 0.1040 | 0.000361111 |  |  |  |  |
|  | 6/29/2012 18:30 | 2.66 | 1.07 | 0.1320 | 0.000458333 |  |  |  |  |
|  | 6/29/2012 18:35 | 2.91 | 1.08 | 0.1510 | 0.000524306 | 4 | 0.00258333 | 0.425 | Vs4, liters |
| Hr. 1.5 | 6/29/2012 18:40 | 3.11 | 1.18 | 0.1830 | 0.000635417 |  |  |  |  |
|  | 6/29/2012 18:45 | 3.23 | 1.17 | 0.1920 | 0.000666667 |  |  |  |  |
|  | 6/29/2012 18:50 | 3.20 | 1.23 | 0.1970 | 0.000684028 |  |  |  |  |
|  | 6/29/2012 18:55 | 3.12 | 1.17 | 0.1810 | 0.000628472 |  |  |  |  |
|  | 6/29/2012 19:00 | 3.04 | 1.20 | 0.1790 | 0.000621528 |  |  |  |  |
|  | 6/29/2012 19:05 | 2.92 | 1.14 | 0.1600 | 0.000555556 | 5 | 0.00379167 | 0.623 | Vs5, liters |
| Hr. 2.0 | 6/29/2012 19:10 | 2.83 | 1.13 | 0.1520 | 0.000527778 |  |  |  | Vs5, inters |
|  | 6/29/2012 19:15 | 2.77 | 1.06 | 0.1380 | 0.000479167 |  |  |  |  |
|  | 6/29/2012 19:20 | 2.68 | 1.10 | 0.1370 | 0.000475694 |  |  |  |  |
|  | 6/29/2012 19:25 | 2.56 | 1.03 | 0.1200 | 0.000416667 |  |  |  |  |
|  | 6/29/2012 19:30 | 2.40 | 0.94 | 0.0990 | 0.000343750 |  |  |  |  |
|  | 6/29/2012 19:35 | 2.24 | 0.97 | 0.0920 | 0.000319444 | 6 | 0.00256250 | 0.421 | Vs6, liters |
| Hr. 2.5 | 6/29/2012 19:40 | 2.08 | 0.90 | 0.0770 | 0.000267361 |  |  |  | Vs, liters |
|  | 6/29/2012 19:45 | 1.94 | 0.90 | 0.0700 | 0.000243056 |  |  |  |  |
|  | 6/29/2012 19:50 | 1.81 | 0.80 | 0.0550 | 0.000190972 |  |  |  |  |
|  | 6/29/2012 19:55 | 1.70 | 0.73 | 0.0460 | 0.000159722 |  |  |  |  |
|  | 6/29/2012 20:00 | 1.59 | 0.70 | 0.0400 | 0.000138889 |  |  | $\checkmark$ |  |
|  | 6/29/2012 20:05 | 1.49 | 0.68 | 0.0350 | 0.000121528 | 7 | 0.00112153 | 0.184 | Vs7, liters |
| Hr. 3.0 | 6/29/2012 20:10 | 1.41 | 0.70 | 0.0340 | 0.000118056 |  |  |  | Vs7, IIters |
|  | 6/29/2012 20:15 | 1.32 | 0.65 | 0.0290 | 0.000100694 |  |  |  |  |
|  | 6/29/2012 20:20 | 1.26 | 0.58 | 0.0240 | 0.000083333 |  |  |  |  |
|  | 6/29/2012 20:25 | 1.19 | 0.58 | 0.0220 | 0.000076389 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 8 | 0.00037847 | 0.062 | Vs8, liters |
| Total: |  |  |  |  |  |  |  |  |  |



|  | Site: | Sawbury Boulevard |  |  | Volume, mgal (mgal) | Sample \# | Flow Volume, mgal | Volume From Sample, Liters$\mathrm{Vs}=\mathrm{Vq} / \mathrm{Vqt} * \mathrm{Vst}$ | Vst, Liters$5.0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Time | Level (in.) | Velocity (ft/s) | Flow (mgd) |  |  |  |  |  |
| Hr. 0 | 9/8/2012 2:10 | 10.10 | 0.12 | 0.2545 | 0.000883543 |  |  |  |  |
|  | 9/8/2012 2:15 | 12.50 | 0.12 | 0.3445 | 0.001196197 |  |  |  |  |
|  | 9/8/2012 2:20 | 15.28 | 1.76 | 6.6886 | 0.023224441 | 1 | 0.02530418 | 0.472 | Vs1, liters |
| Hr. 0.25 | 9/8/2012 2:25 | 16.50 | 1.77 | 7.4785 | 0.025966865 |  |  |  |  |
|  | 9/8/2012 2:30 | 16.48 | 1.74 | 7.3370 | 0.025475770 |  |  |  |  |
|  | 9/8/2012 2:35 | 15.78 | 1.70 | 6.7527 | 0.023446753 | 2 | 0.07488939 | 1.396 | Vs2, liters |
| Hr. 0.50 | 9/8/2012 2:40 | 15.22 | 1.70 | 6.4237 | 0.022304601 |  |  |  | Vs2, iners |
|  | 9/8/2012 2:45 | 14.68 | 0.95 | 3.4133 | 0.011851697 |  |  |  |  |
|  | 9/8/2012 2:50 | 14.40 | 0.95 | 3.3246 | 0.011543799 |  |  |  |  |
|  | 9/8/2012 2:55 | 14.08 | 0.95 | 3.2212 | 0.011184659 | 3 | 0.05688476 | 1.060 | Vs3, liters |
| Hr. 1.0 | 9/8/2012 3:00 | 13.72 | 0.95 | 3.1060 | 0.010784753 |  |  |  |  |
|  | 9/8/2012 3:05 | 13.74 | 0.95 | 3.1133 | 0.010810102 |  |  |  |  |
|  | 9/8/2012 3:10 | 13.78 | 0.95 | 3.1260 | 0.010854188 |  |  |  |  |
|  | 9/8/2012 3:15 | 13.82 | 0.95 | 3.1384 | 0.010897171 |  |  |  |  |
|  | 9/8/2012 3:20 | 13.80 | 0.95 | 3.1333 | 0.010879537 |  |  |  |  |
|  | 9/8/2012 3:25 | 13.90 | 0.95 | 3.1635 | 0.010984240 | 4 | 0.06520999 | 1.215 | Vs4, liters |
| Hr. 1.5 | 9/8/2012 3:30 | 13.84 | 0.95 | 3.1460 | 0.010923623 |  |  |  |  |
|  | 9/8/2012 3:35 | 13.96 | 0.13 | 0.4356 | 0.001512644 |  |  |  |  |
|  | 9/8/2012 3:40 | 14.14 | 0.13 | 0.4435 | 0.001540089 |  |  |  |  |
|  | 9/8/2012 3:45 | 14.10 | 0.13 | 0.4418 | 0.001534021 |  |  |  |  |
|  | 9/8/2012 3:50 | 14.06 | 0.13 | 0.4401 | 0.001528105 |  |  |  |  |
|  | 9/8/2012 3:55 | 14.22 | 0.13 | 0.4470 | 0.001551933 | 5 | 0.01859041 | 0.346 | Vs5, liters |
| Hr. 2.0 | 9/8/2012 4:00 | 14.16 | 0.13 | 0.4442 | 0.001542364 |  |  |  | Vss, inters |
|  | 9/8/2012 4:05 | 14.10 | 0.13 | 0.4418 | 0.001534021 |  |  |  |  |
|  | 9/8/2012 4:10 | 13.96 | 0.13 | 0.4356 | 0.001512644 |  |  |  |  |
|  | 9/8/2012 4:15 | 14.00 | 0.13 | 0.4373 | 0.001518548 |  |  |  |  |
|  | 9/8/2012 4:20 | 14.10 | 0.13 | 0.4418 | $0.001534021$ |  |  |  |  |
|  | 9/8/2012 4:25 | 14.04 | 0.13 | 0.4390 | 0.001524465 | 6 | 0.00916606 | 0.171 | Vs6, liters |
| Hr. 2.5 | 9/8/2012 4:30 | 14.14 | 0.13 | 0.4435 | 0.001540089 |  |  |  | Vs, inters |
|  | 9/8/2012 4:35 | 14.06 | 0.13 | 0.4401 | 0.001528105 |  |  |  |  |
|  | 9/8/2012 4:40 | 14.32 | 0.13 | 0.4515 | 0.001567624 |  |  |  |  |
|  | 9/8/2012 4:45 | 14.16 | 0.13 | 0.4442 | 0.001542364 |  |  |  |  |
|  | 9/8/2012 4:50 | 13.96 | 0.13 | 0.4356 | 0.001512644 |  |  |  |  |
|  | 9/8/2012 4:55 | 13.96 | 0.13 | 0.4356 | 0.001512644 | 7 | 0.00920347 | 0.172 | Vs7, liters |
| Hr. 3.0 | 9/8/2012 5:00 | 14.02 | 0.13 | 0.4384 | 0.001522189 |  |  |  | Vs7, iners |
|  | 9/8/2012 5:05 | 13.82 | 0.13 | 0.4295 | 0.001491192 |  |  |  |  |
|  | 9/8/2012 5:10 | 13.86 | 0.13 | 0.4312 | 0.001497074 |  |  |  |  |
|  | 9/8/2012 5:15 | 13.92 | 0.13 | 0.4339 | 0.001506588 |  |  |  |  |
|  | 9/8/2012 5:20 | 13.94 | 0.13 | 0.4346 | 0.001509010 |  |  |  |  |
|  | 9/8/2012 5:25 | 14.04 | 0.13 | 0.4390 | 0.001524465 | 8 | 0.00905052 | 0.169 | Vs8, liters |
|  |  |  |  |  | 0.268298782 | Vql, mgal |  | 5.000 |  |


|  | Site: | Sawmill Place Bouleveard |  |  | Volume, mgal (mgal) | Sample \# | Flow Volume, mgal Vq | Volume From Sample, Liters$\mathrm{Vs}=\mathrm{Vq} / \mathrm{Vqt}^{*} \mathrm{Vst}$ | Vst, Liters$5.0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Time | Level <br> (in.) | Velocity (fts) | $\begin{aligned} & \text { Flow } \\ & \text { (mgd) } \end{aligned}$ |  |  |  |  |  |
| Hr. 0 | 9/8/2012 2:00 | 5.99 | 1.00 | 0.5790 | 0.002010417 |  |  |  |  |
|  | 9/8/2012 2:05 | 7.15 | 2.23 | 1.6690 | 0.005795139 |  |  |  |  |
|  | 9/8/2012 2:10 | 11.17 | 3.65 | 5.1820 | 0.017993056 | 1 | 0.02579861 | 0.238 | Vs1, liters |
| Hr. 0.25 | 9/8/2012 2:15 | 16.17 | 5.87 | 13.9660 | 0.048493056 |  |  |  |  |
|  | 9/8/2012 2:20 | 17.59 | 6.43 | 17.1600 | 0.059583333 |  |  |  |  |
|  | 9/8/2012 2:25 | 16.89 | 5.85 | 14.7720 | 0.051291667 | 2 | 0.15936806 | 1.468 | Vs2, liters |
| Hr. 0.50 | 9/8/2012 2:30 | 16.51 | 5.20 | 12.7320 | 0.044208333 |  |  |  |  |
|  | 9/8/2012 2:35 | 17.97 | 4.18 | 11.4830 | 0.039871528 |  |  |  |  |
|  | 9/8/2012 2:40 | 18.81 | 3.10 | 9.0550 | 0.031440972 |  |  |  |  |
|  | 9/8/2012 2:45 | 19.39 | 2.30 | 6.9960 | 0.024291667 | 3 | 0.13981250 | 1.288 | Vs3, liters |
| Hr. 1.0 | 9/8/2012 2:50 | 19.83 | 2.04 | 6.3940 | 0.022201389 |  |  |  |  |
|  | 9/8/2012 2:55 | 19.65 | 1.57 | 4.8610 | 0.016878472 |  |  |  |  |
|  | 9/8/2012 3:00 | 19.73 | 1.27 | 3.9540 | 0.013729167 |  |  |  |  |
|  | 9/8/2012 3:05 | 19.95 | 1.09 | 3.4440 | 0.011958333 |  |  |  |  |
|  | 9/8/2012 3:10 | 20.01 | 0.94 | 2.9820 | 0.010354167 |  |  |  |  |
|  | 9/8/2012 3:15 | 19.89 | 0.92 | 2.8950 | 0.010052083 | 4 | 0.08517361 | 0.785 | Vs4, liters |
| Hr. 1.5 | 9/8/2012 3:20 | 19.61 | 0.81 | 2.5010 | 0.008684028 |  |  |  |  |
|  | 9/8/2012 3:25 | 19.47 | 0.69 | 2.1110 | 0.007329861 |  |  |  |  |
|  | 9/8/2012 3:30 | 19.37 | 0.69 | 2.0960 | 0.007277778 |  |  |  |  |
|  | 9/8/2012 3:35 | 19.13 | 0.71 | 2.1210 | 0.007364583 |  |  |  |  |
|  | 9/8/2012 3:40 | 18.85 | 0.76 | 2.2260 | 0.007729167 |  |  |  |  |
|  | 9/8/2012 3:45 | 18.71 | 0.75 | 2.1750 | 0.007552083 | 5 | 0.04593750 | 0.423 | Vs5, liters |
| Hr. 2.0 | 9/8/2012 3:50 | 18.57 | 0.74 | 2.1250 | 0.007378472 |  |  |  |  |
|  | 9/8/2012 3:55 | 18.35 | 0.74 | 2.0910 | 0.007260417 |  |  |  |  |
|  | 9/8/2012 4:00 | 18.15 | 0.75 | 2.0880 | 0.007250000 |  |  |  |  |
|  | 9/8/2012 4:05 | 18.05 | 0.77 | 2.1280 | 0.007388889 |  |  |  |  |
|  | 9/8/2012 4:10 | 17.79 | 0.75 | 2.0320 | 0.007055556 |  |  |  |  |
|  | 9/8/2012 4:15 | 17.59 | 0.74 | 1.9750 | 0.006857639 | 6 | 0.04319097 | 0.398 | Vs6, liters |
| Hr. 2.5 | 9/8/2012 4:20 | 17.09 | 0.71 | 1.8220 | 0.006326389 |  |  |  |  |
|  | 9/8/2012 4:25 | 17.11 | 0.65 | 1.6710 | 0.005802083 |  |  |  |  |
|  | 9/8/2012 4:30 | 17.15 | 0.60 | 1.5470 | 0.005371528 |  |  |  |  |
|  | 9/8/2012 4:35 | 16.87 | 0.56 | 1.4120 | 0.004902778 |  |  |  |  |
|  | 9/8/2012 4:40 | 16.75 | 0.45 | 1.1240 | 0.003902778 |  |  |  |  |
|  | 9/8/2012 4:45 | 16.01 | 0.45 | 1.0560 | 0.003666667 | 7 | 0.02997222 | 0.276 | Vs7, liters |
| Hr. 3.0 | 9/8/2012 4:50 | 15.99 | 0.42 | 0.9840 | 0.003416667 |  |  |  |  |
|  | 9/8/2012 4:55 | 16.11 | 0.38 | 0.9000 | 0.003125000 |  |  |  |  |
|  | 9/8/2012 5:00 | 16.05 | 0.38 | 0.0000 | 0.000000000 |  |  |  |  |
|  | 9/8/2012 5:05 | 15.85 | 0.32 | 0.7410 | 0.002572917 |  |  |  |  |
|  | 9/8/2012 5:10 | 15.75 | 0.30 | 0.6890 | 0.002392361 |  |  |  |  |
|  | 9/8/2012 5:15 | 15.41 | 0.27 | 0.6010 | 0.002086806 | 8 | 0.01359375 | 0.125 | Vs8, liters |
| Total: |  |  |  |  |  |  |  |  |  |


|  | Site: <br> Time | Level <br> (in.) | Joyce Avenue Velocity (ft/s) | Flow (mgd) | Volume, mgal (mgal) | Sample \# | Flow Volume, mgal $\mathrm{Vq}$ | Volume From Sample, Liters $\mathrm{Vs}=\mathrm{Vq} / \mathrm{Vqt}^{*} \mathrm{Vst}$ | Vst, Liters $5.0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9/7/2012 16:50 | 0.01 | 0.00 | 0.0000 | 0.000000000 |  |  |  |  |
| Hr. 0 | 9/7/2012 16:55 | 0.02 | 0.00 | 0.0000 | 0.000000000 |  |  |  | Vs1, liters |
|  | 9/7/2012 17:00 | 0.42 | 1.56 | 0.0120 | 0.000041667 | 1 | 0.00004167 | 0.028 |  |
| Hr. 0.25 | 9/7/2012 17:05 | 2.93 | 4.68 | 0.6140 | 0.002131944 |  |  |  |  |
|  | 9/7/2012 17:10 | 2.44 | 4.73 | 0.4730 | 0.001642361 |  |  |  | Vs2, liters |
|  | 9/7/2012 17:15 | 1.92 | 4.08 | 0.2870 | 0.000996528 | 2 | 0.00477083 | 3.151 |  |
|  | 9/7/2012 17:20 | 1.53 | 3.54 | 0.1790 | 0.000621528 |  |  |  |  |
| Hr. 0.50 | 9/7/2012 17:25 | 1.41 | 3.07 | 0.1370 | 0.000475694 |  |  |  | Vs3, liters |
|  | 9/7/2012 17:30 | 1.17 | 3.07 | 0.1050 | 0.000364583 |  |  |  |  |
|  | 9/7/2012 17:35 | 0.98 | 2.78 | 0.0720 | 0.000250000 | 3 | 0.00171181 | 1.131 |  |
|  | 9/7/2012 17:40 | 0.97 | 2.78 | 0.0720 | 0.000250000 |  |  |  |  |
|  | 9/7/2012 17:45 | 0.87 | 2.63 | 0.0580 | 0.000201389 |  |  |  |  |
|  | 9/7/2012 17:50 | 0.83 | 2.55 | 0.0520 | 0.000180556 |  |  |  |  |
| Hr. 1.0 | 9/7/2012 17:55 | 0.78 | 2.39 | 0.0450 | 0.000156250 |  |  |  | Vs4, liters |
|  | 9/7/2012 18:00 | 0.74 | 2.30 | 0.0390 | 0.000135417 |  |  |  |  |
|  | 9/7/2012 18:05 | 0.70 | 2.22 | 0.0350 | 0.000121528 | 4 | 0.00104514 | 0.690 |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 1.5 |  |  |  |  | 0.000000000 |  |  |  | Vs5, liters |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 5 | 0.00000000 | 0.000 |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 2.0 |  |  | . |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 6 | 0.00000000 | 0.000 | Vs6, liters |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 2.5 |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 7 | 0.00000000 | 0.000 | Vs7, liters |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
| Hr. 3.0 |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 8 | 0.00000000 | 0.000 | Vs8, liters |
|  |  | Total: |  |  |  |  |  |  |  |
|  |  |  |  |  | $0.007569444$ | Vgt, mga! |  | 5.000 |  |



|  | Site: | Petzinger Road |  |  |  | Sample \# | Flow Volume, mgal Vq | Volume From Sample, Liters Vs $=\mathrm{Vq} / \mathrm{Vqt}^{*}$ Vst | Vst, Liters$10.0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Time | Level <br> (in.) | Velocity (fts) | Flow (mgd) | Volume, mgal (mgal) |  |  |  |  |
| Hr. 0 | 9/8/2012 2:10 | 0.48 | 0.72 | 0.0090 | 0.000031250 |  |  |  |  |
|  | 9/8/2012 2:15 | 0.48 | 0.72 | 0.0090 | 0.000031250 |  |  |  |  |
|  | 9/8/2012 2:20 | 0.85 | 1.39 | 0.0630 | 0.000218750 | 1 | 0.00028125 | 0.022 | Vs1, liters |
| Hr. 0.25 | 9/8/2012 2:25 | 3.50 | 3.54 | 0.8980 | 0.003118056 |  |  |  |  |
|  | 9/8/2012 2:30 | 9.70 | 5.99 | 6.6780 | 0.023187500 |  |  |  |  |
|  | 9/8/2012 2:35 | 6.98 | 5.96 | 4.0890 | 0.014197917 | 2 | 0.04050347 | 3.135 | Vs2, liters |
| Hr. 0.50 | 9/8/2012 2:40 | 4.92 | 4.94 | 2.0370 | 0.007072917 |  |  |  |  |
|  | 9/8/2012 2:45 | 4.06 | 4.58 | 1.4150 | 0.004913194 |  |  |  |  |
|  | 9/8/2012 2:50 | 3.70 | 4.53 | 1.2220 | 0.004243056 |  |  |  |  |
|  | 9/8/2012 2:55 | 3.20 | 4.53 | 0.9860 | 0.003423611 | 3 | 0.01965278 | 1.521 | Vs3, liters |
| Hr. 1.0 | 9/8/2012 3:00 | 2.89 | 4.53 | 0.8480 | 0.002944444 |  |  |  | Vs3, inters |
|  | 9/8/2012 3:05 | 2.65 | 4.53 | 0.7430 | 0.002579861 |  |  |  |  |
|  | 9/8/2012 3:10 | 2.50 | 4.56 | 0.6860 | 0.002381944 |  |  |  |  |
|  | 9/8/2012 3:15 | 2.36 | 4.54 | 0.6290 | 0.002184028 |  |  |  |  |
|  | 9/8/2012 3:20 | 2.25 | 4.49 | 0.5810 | 0.002017361 |  |  |  |  |
|  | 9/8/2012 3:25 | 2.25 | 4.28 | 0.5520 | 0.001916667 | 4 | 0.01402431 | 1.085 | Vs4, liters |
| Hr. 1.5 | 9/8/2012 3:30 | 2.45 | 4.22 | 0.6150 | 0.002135417 |  |  |  |  |
|  | 9/8/2012 3:35 | 2.85 | 4.29 | 0.7870 | 0.002732639 |  |  |  |  |
|  | 9/8/2012 3:40 | 3.20 | 4.42 | 0.9600 | 0.003333333 |  |  |  |  |
|  | 9/8/2012 3:45 | 3.48 | 4.63 | 1.1390 | 0.003954861 |  |  |  |  |
|  | 9/8/2012 3:50 | 3.81 | 4.85 | 1.3620 | 0.004729167 |  |  |  |  |
|  | 9/8/2012 3:55 | 4.08 | 4.92 | 1.5280 | 0.005305556 | 5 | 0.02219097 | 1.718 | Vs5, liters |
| Hr. 2.0 | 9/8/2012 4:00 | 4.23 | 4.64 | 1.5210 | 0.005281250 |  |  |  |  |
|  | 9/8/2012 4:05 | 5.65 | 3.40 | 1.6770 | 0.005822917 |  |  |  |  |
|  | 9/8/2012 4:10 | 7.18 | 2.02 | 1.4190 | 0.004927083 |  |  |  |  |
|  | 9/8/2012 4:15 | 7.81 | 1.18 | 0.9410 | 0.003267361 |  |  |  |  |
|  | 9/8/2012 4:20 | 8.03 | 0.85 | 0.7110 | 0.002468750 |  |  |  |  |
|  | 9/8/2012 4:25 | 8.10 | 0.70 | 0.5930 | 0.002059028 | 6 | 0.02382639 | 1.844 | Vs6, liters |
| Hr. 2.5 | 9/8/2012 4:30 | 8.03 | 0.54 | 0.4480 | 0.001555556 |  |  |  |  |
|  | 9/8/2012 4:35 | 8.09 | 0.50 | 0.4240 | 0.001472222 |  |  |  |  |
|  | 9/8/2012 4:40 | 7.99 | 0.43 | 0.3550 | 0.001232639 |  |  |  |  |
|  | 9/8/2012 4:45 | 7.22 | 0.34 | 0.2400 | 0.000833333 |  |  |  |  |
|  | 9/8/2012 4:50 | 7.31 | 0.19 | 0.1350 | 0.000468750 |  |  |  |  |
|  | 9/8/2012 4:55 | 7.19 | 0.24 | 0.1700 | 0.000590278 | 7 | 0.00615278 | 0.476 | Vs7, liters |
| Hr. 3.0 | 9/8/2012 5:00 | 7.10 | 0.24 | 0.1670 | 0.000579861 |  |  |  | Vs7, Mters |
|  | 9/8/2012 5:05 | 7.03 | 0.22 | 0.1520 | 0.000527778 |  |  |  |  |
|  | 9/8/2012 5:10 | 6.97 | 0.21 | 0.1390 | 0.000482639 |  |  |  |  |
|  | 9/8/2012 5:15 | 6.88 | 0.21 | 0.1360 | 0.000472222 |  |  |  |  |
|  | 9/8/2012 5:20 | 7.21 | 0.21 | 0.1460 | 0.000506944 |  |  |  |  |
|  |  |  |  |  | 0.000000000 | 8 | 0.00256944 | 0.199 | Vs8, liters |
| Total: |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | 0.129201389 | Vgt, mgal |  | 10.000 |  |



|  | Site: | Sawmill Place Bouleveard |  |  | Volume, mgal (mgal) | Sample \# | Flow Volume, mgal Vq | Volume From Sample, Liters$\mathrm{V}_{\mathrm{s}}=\mathrm{Vq} / \mathrm{Vqt}^{*} \mathrm{Vst}$ | Vst, Liters$5.0$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Time | Level (in.) | Velocity (fts) | Flow (mgd) |  |  |  |  |  |
| Hr. 0 | 12/2/2012 8:25 | 4.95 | 0.06 | 0.0260 | 0.000090278 |  |  |  |  |
|  | 12/2/2012 8:30 | 4.97 | 0.18 | 0.0790 | 0.000274306 |  |  |  |  |
|  | 12/2/2012 8:35 | 5.09 | 0.32 | 0.1460 | 0.000506944 | 1 | 0.00087153 | 0.019 | Vs1, liters |
| Hr. 0.25 | 12/2/2012 8:40 | 5.19 | 0.33 | 0.1550 | 0.000538194 |  |  |  |  |
|  | 12/2/2012 8:45 | 5.23 | 1.68 | 0.7970 | 0.002767361 |  |  |  |  |
|  | 12/2/2012 8:50 | 5.35 | 2.51 | 1.2310 | 0.004274306 | 2 | 0.00757986 | 0.162 | Vs2, liters |
| Hr. 0.50 | 12/2/2012 8:55 | 5.67 | 2.97 | 1.5850 | 0.005503472 |  |  |  | Vs2, Iters |
|  | 12/2/2012 9:00 | 6.15 | 3.10 | 1.8630 | 0.006468750 |  |  |  |  |
|  | 12/2/2012 9:05 | 6.17 | 3.15 | 1.9020 | 0.006604167 |  |  |  |  |
|  | 12/2/2012 9:10 | 6.93 | 3.08 | 2.2010 | 0.007642361 | 3 | 0.02621875 | 0.562 | Vs3, liters |
| Hr. 1.0 | 12/2/2012 9:15 | 7.37 | 3.37 | 2.6350 | 0.009149306 |  |  |  | Vs3, inters |
|  | 12/2/2012 9:20 | 8.19 | 3.38 | 3.0770 | 0.010684028 |  |  |  |  |
|  | 12/2/2012 9:25 | 8.75 | 3.68 | 3.6880 | 0.012805556 |  |  |  |  |
|  | 12/2/2012 9:30 | 8.95 | 3.53 | 3.6550 | 0.012690972 |  |  |  |  |
|  | 12/2/2012 9:35 | 9.55 | 3.25 | 3.6920 | 0.012819444 |  |  |  |  |
|  | 12/2/2012 9:40 | 9.65 | 2.95 | 3.4000 | 0.011805556 | 4 | 0.06995486 | 1.498 | Vs4, liters |
| Hr. 1.5 | 12/2/2012 9:45 | 9.75 | 2.40 | 2.8090 | 0.009753472 |  |  |  | Vs4, iners |
|  | 12/2/2012 9:50 | 9.99 | 1.93 | 2.3390 | 0.008121528 |  |  |  |  |
|  | 12/2/2012 9:55 | 10.07 | 1.54 | 1.8870 | 0.006552083 |  |  |  |  |
|  | 12/2/2012 10:00 | 10.33 | 1.18 | 1.5000 | 0.005208333 |  |  |  |  |
|  | 12/2/2012 10:05 | 10.61 | 0.98 | 1.2930 | 0.004489583 |  |  |  |  |
|  | 12/2/2012 10:10 | 10.61 | 0.89 | 1.1750 | 0.004079861 | 5 | 0.03820486 | 0.818 | Vs5, liters |
| Hr. 2.0 | 12/2/2012 10:15 | 10.61 | 0.74 | 0.9770 | 0.003392361 |  |  |  |  |
|  | 12/2/2012 10:20 | 10.65 | 0.60 | 0.7960 | 0.002763889 |  |  |  |  |
|  | 12/2/2012 10:25 | 10.71 | 0.66 | 0.8830 | 0.003065972 |  |  |  |  |
|  | 12/2/2012 10:30 | 10.73 | 0.82 | 1.1000 | 0.003819444 |  |  |  |  |
|  | 12/2/2012 10:35 | 10.91 | 1.42 | 1.9500 | 0.006770833 |  |  |  |  |
|  | 12/2/2012 10:40 | 11.17 | 1.84 | 2.6120 | 0.009069444 | 6 | 0.02888194 | 0.619 | Vs6, liters |
| Hr. 2.5 | 12/2/2012 10:45 | 11.51 | 1.96 | 2.9040 | 0.010083333 |  |  |  |  |
|  | 12/2/2012 10:50 | 11.53 | 1.84 | 2.7330 | 0.009489583 |  |  |  |  |
|  | 12/2/2012 10:55 | 11.71 | 1.41 | 2.1410 | 0.007434028 |  |  |  |  |
|  | 12/2/2012 11:00 | 11.77 | 1.21 | 1.8500 | 0.006423611 |  |  |  |  |
|  | 12/2/2012 11:05 | 11.87 | 0.94 | 1.4540 | 0.005048611 |  |  |  |  |
|  | 12/2/2012 11:10 | 12.03 | 0.85 | 1.3400 | 0.004652778 | 7 | 0.04313194 | 0.924 | Vs7, liters |
| Hr. 3.0 | 12/2/2012 11:15 | 12.09 | 0.72 | 1.1430 | 0.003968750 |  |  |  | , 7 , iners |
|  | 12/2/2012 11:20 | 12.09 | 0.66 | 1.0480 | 0.003638889 |  |  |  |  |
|  | 12/2/2012 11:25 | 12.09 | 0.60 | 0.9530 | 0.003309028 |  |  |  |  |
|  | 12/2/2012 11:30 | 11.97 | 0.52 | 0.8140 | 0.002826389 |  |  |  |  |
|  | 12/2/2012 11:35 | 12.01 | 0.48 | 0.7550 | 0.002621528 |  |  |  |  |
|  | 12/2/2012 11:40 | 11.81 | 0.42 | 0.6450 | 0.002239583 | 8 | 0.01860417 | 0.398 | Vs8, liters |

Total:
0.233447917 Vqt, mgal
5.000

Appendix C_Flow Data Composite Flow Calculations.pdf



Total:
0.113770833 Vgt, mgal
5.000


## Appendix D

Bacteria Flow-weighted Average EMCs

MH-1A - Fecal Coliform and E. Coli Flow Weighted Averages
QUARTER 2

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 6/29/12 | 18:00 | 610,000 | 140,000 | 0.921 | 112,362 | 25,788 |
| Hr. 0.25 | 6/29/12 | 18:15 | 470,000 | 22,000 | 0.928 | 87,232 | 4,083 |
| Hr. 0.50 | 6/29/12 | 18:30 | 520,000 | 10,000 | 1.253 | 130,312 | 2,506 |
| Hr. 1.0 | 6/29/12 | 19:00 | 430,000 | 10,000 | 1.898 | 163,228 | 3,796 |
| Hr. 1.5 |  |  | "Mm |  |  | 㕸 |  |
| Hr. 2.0 | , | S |  |  |  |  |  |
| Hr. 2.5 |  |  |  |  |  |  |  |
| Hr. 3.0 |  |  |  |  |  |  |  |
| Flow Weighted Average of Grab Samples |  |  |  |  | 5 | 493,134 | 36,173 |

QUARTER 3

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 9/8/12 | 2:15 | 230,000 | 16,000 | 0.472 | 21,712 | 1,510 |
| Hr. 0.25 | 9/8/12 | 2:30 | 47,000 | 22,000 | 1.396 | 13,122 | 6,142 |
| Hr. 0.50 | 9/8/12 | 2:45 | 70,000 | 29,000 | 1.060 | 14,840 | 6,148 |
| Hr. 1.0 | 9/8/12 | 3:15 | 70,000 | 27,000 | 1.215 | 17,010 | 6,561 |
| Hr. 1.5 | 9/8/12 | 3:45 | 49,000 | 27,000 | 0.346 | 3,391 | 1,868 |
| Hr. 2.0 | 9/8/12 | 4:15 | 600000 | 19,000 | 0.171 | 20,520 | 650 |
| Hr. 2.5 | 9/8/12 | 4:45 | 600,000 | 10,000 | 0.172 | 20,640 | 344 |
| Hr. 3.0 | 9/8/12 | 5:15 | 110,000 | 15,000 | 0.169 | 3,718 | 507 |
| Flow Weighted Average of Grab Samples |  |  |  |  | 5 | 114,953 | 23,731 |

QUARTER 4

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform $(\# 100 \mathrm{ml})^{1}$ | $\begin{gathered} \text { E.coli } \\ (\# 1100 \mathrm{ml})^{1} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. O | 11/12/12 | 7:30 | 7,200 | 5,000 |  |  |  |
| Hr. 0.25 | 11/12/12 | 7:45 | 29,000 | 10,000 |  | - |  |
| Hr. 0.50 | 11/12/12 | 8:00 | 23,000 | 18,000 |  |  |  |
| Hr. 1.0 | 11/12/12 | 8:30 | 32,000 | 12,000 |  |  |  |
| Hr. 1.5 | 11/12/12 | 9:00 | 7,000 | 3,400 |  |  |  |
| Hr. 2.0 | 11/12/12 | 9:30 | 11,000 | 7,000 |  |  |  |
| Hr. 2.5 | 11/12/12 | 10:00 | 11,000 | 6,000 |  |  |  |
| Hr. 3.0 | 11/12/12 | 10:30 | 12,000 | 6,000 |  |  |  |
| Flow Weighted Average of Grab Samples |  |  | 16,525 | 8,425 | 0 | 16,525 | 8,425 |

1. No flow data available due to sensor malfunction, composite calculated from the arithmetic mean.

MH-02 - Fecal Coliform and E. Coli Flow Weighted Averages
QUARTER 2

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ \text { (\#/100 ml) } \end{gathered}$ | Volume from Sample (I) | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 6/29/12 | 18:15 | 37,000 | 26,000 | 1.470 | 10,880 | 7,646 |
| Hr. 0.25 | 6/29/12 | 18:30 | 260,000 | 14,000 | 1.115 | 57,992 | 3,123 |
| Hr. 0.50 | 6/29/12 | 18:45 | 43,000 | 25,000 | 1.209 | 10,399 | 6,046 |
| Hr. 1.0 | 6/29/12 | 19:15 | 600,000 | 14,000 | 1.205 | 144,629 | 3,375 |
| Hr. 1.5 |  |  |  |  |  |  |  |
| Hr. 2.0 |  |  |  |  |  |  |  |
| Hr. 2.5 |  |  |  |  |  |  |  |
| Hr. 3.0 |  |  |  |  |  |  |  |
| Flow Weighted Average of Grab Samples |  |  |  |  | 5 | 223,900 | 20,189 |

QUARTER 3

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform $(\# / 100 \mathrm{ml})$ | $\begin{gathered} \text { E.coli } \\ \text { (\#/100 ml) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 09/08/12 | 2:05 | 170,000 | 29,000 | 0.238 | 8,094 | 1,381 |
| Hr. 0.25 | 09/08/12 | 2:20 | 210,000 | 31,000 | 1.468 | 61,668 | 9,103 |
| Hr. 0.50 | 09/08/12 | 2:35 | 300,000 | 12,000 | 1.288 | 77,295 | 3,092 |
| Ir. 1.0 | 09/08/12 | 3:05 | 80,000 | 46,000 | 0.785 | 12,563 | 7,223 |
| Ar. 1.5 | 09/08/12 | 3:35 | 35,000 | 90,000 | 0.423 | 2,962 | 7,616 |
| Hr. 2.0 | 09/08/12 | 4:05 | 50,000 | 16,000 | 0.398 | 3,981 | 1,274 |
| Hr. 2.5 | 09/08/12 | 4:35 | 55,000 | 22,000 | 0.276 | 3,037 | 1,215 |
| Hr. 3.0 | 09/08/12 | 5:05 | 52,000 | 33,000 | 0.125 | 1,300 | 825 |
| Flow Weighted Average of Grab Samples |  |  |  |  | 5 | 170,899 | 31,729 |

QUARTER 4

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform $(\# / 100 \mathrm{ml})$ | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 12/02/12 | 8:30 | 1,700 | 1,500 | 0.019 | 6 | 6 |
| Hr. 0.25 | 12/02/12 | 8:45 | 7,600 | 5,500 | 0.162 | 246 | 178 |
| Hr. 0.50 | 12/02/12 | 9:00 | 15,000 | 11,000 | 0.562 | 1,686 | 1,237 |
| Hr. 1.0 | 12/02/12 | 9:30 | 2,600 | 1,800 | 1.498 | 779 | 539 |
| Hr. 1.5 | 12/02/12 | 10:00 | 1,700 | 1,400 | 0.818 | 278 | 229 |
| Hr. 2.0 | 12/02/12 | 10:30 | 2,500 | 1,100 | 0.619 | 310 | 136 |
| Hr. 2.5 | 12/02/12 | 11:00 | 1,500 | 1,200 | 0.924 | 277 | 222 |
| Hr. 3.0 | 12/02/12 | 11:30 | 29,000 | 2,200 | 0.398 | 2,309 | 175 |
| Flow Weighted Average of Grab Samples |  |  |  |  | 5 | 5,892 | 2,722 |

## MH-03 - Fecal Coliform and E. Coli Flow Weighted Averages

QUARTER 2

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform $(\# / 100 \mathrm{ml})^{1}$ | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml})^{1} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 06/29/12 | 17:25 | 37,000 | 9,000 |  |  |  |
| Hr. 0.25 | 06/29/12 | 17:40 | 38,000 | 14,000 |  |  |  |
| Hr. 0.50 | 06/29/12 | 17:55 | 71,000 | 15,000 |  |  |  |
| Hr. 1.0 | 06/29/12 | 18:25 | 63,000 | 31,000 |  |  |  |
| Hr. 1.5 | 06/29/12 | 18:55 | 71,000 | 14,000 |  |  |  |
| Hr. 2.0 | 06/29/12 | 19:25 | 490,000 | 35,000 |  |  |  |
| Hr. 2.5 | 06/29/12 | 19:55 | 600,000 | 62,000 |  |  |  |
| Hr. 3.0 | 06/29/12 | 20:25 | 600000 | 600000 |  |  |  |
| Flow Weighted Average of Grab Samples |  |  | 195,714 | 25,714 | 0 | 195,714 | 25,714 |

1. No flow data available due to sensor malfunction, composite calculated from the arithmetic mean.

QUARTER 3

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (l) | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 09/07/12 | 16:55 | 770,000 | 50,000 | 0.028 | 4,312 | 280 |
| Hr. 0.25 | 09/07/12 | 17:10 | 510,000 | 100,000 | 3.151 | 321,402 | 63,020 |
| Hr. 0.50 | 09/07/12 | 17:25 | 520,000 | 120,000 | 1.131 | 117,624 | 27,144 |
| Hr. 1.0 | 09/07/12 | 17:55 | 470,000 | 180,000 | 0.690 | 64,860 | 24,840 |
| Hr. 1.5 |  |  |  |  |  |  |  |
| Hr. 2.0 |  |  |  |  |  |  |  |
| Hr. 2.5 |  |  |  |  |  |  |  |
| Hr. 3.0 |  |  |  |  |  |  |  |
| Flow Weighted Average of Grab Samples |  |  |  |  | 5 | 508,198 | 115,284 |

QUARTER 4

| Sample | DATE | TIME | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform (\#/100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 11/12/12 | 8:25 | 35,000 | 16,000 | 0.069 | 483 | 221 |
| Hr. 0.25 | 11/12/12 | 8:40 | 10,000 | 7,000 | 0.178 | 356 | 249 |
| Hr. 0.50 | 11/12/12 | 8:55 | 20,000 | 11,000 | 0.550 | 2,200 | 1,210 |
| Hr. 1.0 | 11/12/12 | 9:25 | 16,000 | 1,700 | 1.375 | 4,400 | 468 |
| Hr. 1.5 | 11/12/12 | 9:55 | 80,000 | 1,600 | 1.489 | 23,824 | 476 |
| Hr. 2.0 | 11/12/12 | 10:25 | 10,000 | 1,500 | 0.404 | 808 | 121 |
| Hr. 2.5 | 11/12/12 | 10:55 | 8,000 | 800 | 0.429 | 686 | 69 |
| Hr. 3.0 | 11/12/12 | 11:25 | 9,000 | 900 | 0.506 | 911 | 91 |
| Flow Weighted Average of Grab Samples |  |  |  |  | 5 | 33,668 | 2,905 |

## MH-4B - Fecal Coliform and E. Coli Flow Weighted Averages

QUARTER 2

| Sample | DATE | TIME | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ | Volume from <br> Sample (l) | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | $06 / 29 / 12$ | $17: 25$ | 0 | 0 | 0.191 | 0 | 0 |
| Hr. 0.25 | $06 / 29 / 12$ | $17: 40$ | 600,000 | 600,000 | 1.717 | 206,040 | 206,040 |
| Hr. 0.50 | $06 / 29 / 12$ | $17: 55$ | 600,000 | 600,000 | 1.052 | 126,240 | 126,240 |
| Hr. 1.0 | $06 / 29 / 12$ | $18: 25$ | 600,000 | 600,000 | 0.775 | 93,000 | 93,000 |
| Hr. 1.5 | $06 / 29 / 12$ | $18: 55$ | 600,000 | 600,000 | 0.635 | 76,200 | 76,200 |
| Hr. 2.0 | $06 / 29 / 12$ | $19: 25$ | 600,000 | 600,000 | 0.433 | 51,960 | 51,960 |
| Hr. 2.5 | $06 / 29 / 12$ | $19: 55$ | 600,000 | 600,000 | 0.136 | 16,320 | 16,320 |
| Hr. 3.0 | $06 / 29 / 12$ | $20: 25$ | 600,000 | 600,000 | 0.061 | 7,320 | 7,320 |
| Flow Weighted Average of Grab Samples |  |  |  |  |  |  |  |

QUARTER 3

| Sample | DATE | TIME | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ | Volume from <br> Sample ( $)$ | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | $09 / 08 / 12$ | $2: 10$ | 600,000 | 380,000 | 0.191 | 22,920 | 14,516 |
| Hr. 0.25 | $09 / 08 / 12$ | $2: 25$ | 720,000 | 410,000 | 1.717 | 247,248 | 140,794 |
| Hr 0.50 | $09 / 08 / 12$ | $2: 40$ | 790,000 | 370,000 | 1.052 | 166,216 | 77,848 |
| Ir. 1.0 | $09 / 08 / 12$ | $3: 10$ | 500,000 | 180,000 | 0.775 | 77,500 | 27,900 |
| Hr. 1.5 | $09 / 08 / 12$ | $3: 40$ | 510,000 | 220,000 | 0.635 | 64,770 | 27,940 |
| Hr. 2.0 | $09 / 08 / 12$ | $4: 10$ | 110,000 | 34,000 | 0.433 | 9,526 | 2,944 |
| Hr. 2.5 | $09 / 08 / 12$ | $4: 40$ | 140,000 | 37,000 | 0.136 | 3,808 | 1,006 |
| Hr. 3.0 | $09 / 08 / 12$ | $5: 10$ | 57,000 | 20,000 | 0.061 | 695 | 244 |
| Flow Weighted Average of Grab Samples |  |  | 5 | $\mathbf{5 9 2 , 6 8 3}$ | $\mathbf{2 9 3 , 1 9 3}$ |  |  |

QUARTER 4

| Sample | DATE | TIME | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ | Volume from <br> Sample (I) | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | $11 / 12 / 12$ | $8: 10$ | 41,000 | 31,000 | 0.027 | 221 | 167 |
| Hr. 0.25 | $11 / 12 / 12$ | $8: 25$ | 100,000 | 19,000 | 0.199 | 3,982 | 757 |
| Hr. 0.50 | $11 / 12 / 12$ | $8: 40$ | 120,000 | 22,000 | 0.439 | 10,540 | 1,932 |
| Hr. 1.0 | $11 / 12 / 12$ | $9: 10$ | 52,000 | 31,000 | 1.050 | 10,924 | 6,513 |
| Hr. 1.5 | $11 / 12 / 12$ | $9: 40$ | 23,000 | 14,000 | 1.260 | 5,798 | 3,529 |
| Hr. 2.0 | $11 / 12 / 12$ | $10: 10$ | 39,000 | 22,000 | 0.916 | 7,148 | 4,032 |
| Hr. 2.5 | $11 / 12 / 12$ | $10: 40$ | 33,000 | 25,000 | 0.630 | 4,160 | 3,151 |
| Hr. 3.0 | $11 / 12 / 12$ | $11: 10$ | 35,000 | 11,000 | 0.477 | 3,340 | 1,050 |
| Flow Weighted Average of Grab Samples |  |  |  |  |  |  |  |

## MH-05 - Fecal Coliform and E. Coli Flow Weighted Averages

QUARTER 2

| Sample | DATE | TIME | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ | Volume from <br> Sample (I) | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | Ecoli <br> $(\# / 100 \mathrm{ml})$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | $06 / 29 / 12$ | $17: 25$ | 600,000 | 16,000 | 0.022 | 1,320 | 35 |
| Hr. 0.25 | $06 / 29 / 12$ | $17: 40$ | 150,000 | 12,000 | 3.135 | 47,025 | 3,762 |
| Hr. 0.50 | $06 / 29 / 12$ | $17: 55$ | 380,000 | 15,000 | 1.521 | 57,798 | 2,282 |
| Hr. 1.0 | $06 / 29 / 12$ | $18: 25$ | 680,000 | 25,000 | 1.085 | 73,780 | 2,713 |
| Hr. 1.5 | $06 / 29 / 12$ | $18: 55$ | 580,000 | 27,000 | 1.718 | 99,644 | 4,639 |
| Hr. 2.0 | $06 / 29 / 12$ | $19: 25$ | 600000 | 25,000 | 1.844 | 110,640 | 4,610 |
| Hr. 2.5 | $06 / 29 / 12$ | $19: 55$ | 600000 | 11,000 | 0.476 | 28,560 | 524 |
| Hr. 3.0 | $06 / 29 / 12$ | $20: 25$ | 600000 | 23,000 | 0.199 | 11,940 | 458 |
| Flow Weighted Average of Grab Samples |  |  | 10 | 430,707 | 19,021 |  |  |

QUARTER 3

| Sample | DATE | TIME | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ | Volume from <br> Sample (I) | Fecal Coliform <br> $(\# / 100 \mathrm{ml})$ | E.coli <br> $(\# / 100 \mathrm{ml})$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | $09 / 08 / 12$ | $2: 15$ | 600,000 | 70,000 | 0.022 | 1,320 | 154 |
| Hr. 0.25 | $09 / 08 / 12$ | $2: 30$ | 600,000 | 21,000 | 3.135 | 188,100 | 6,584 |
| Hr. 0.50 | $09 / 08 / 12$ | $2: 45$ | 420,000 | 80,000 | 1.521 | 63,882 | 12,168 |
| Hr. 1.0 | $09 / 08 / 12$ | $3: 15$ | 310,000 | 50,000 | 1.085 | 33,635 | 5,425 |
| Hr. 1.5 | $09 / 08 / 12$ | $3: 45$ | 70,000 | 50,000 | 1.718 | 12,026 | 8,590 |
| Hr. 2.0 | $09 / 08 / 12$ | $4: 15$ | 90,000 | 70,000 | 1.844 | 16,596 | 12,908 |
| Hr. 2.5 | $09 / 08 / 12$ | $4: 45$ | 90,00 | 40,000 | 0.476 | 4,284 | 1,904 |
| Hr. 30 | $09 / 08 / 12$ | $5: 15$ | 110,000 | 80,000 | 0.199 | 2,189 | 1,592 |
| Flow Weighted Average of Grab Samples |  |  | 10 | 322,032 | 49,325 |  |  |

QUARTER 4

| Sample | DATE | TIME | Fecal Coliform (\#1100 ml) | $\begin{gathered} \text { E.coli } \\ (\# / 100 \mathrm{ml}) \end{gathered}$ | Volume from Sample (I) | Fecal Coliform (\#100 ml) | $\underset{(\# / 100 \mathrm{ml})}{\mathrm{E.coli}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hr. 0 | 11/12/12 | 8:20 | 32,000 | 1,000 | 0.032 | 102 | 3 |
| Hr. 0.25 | 11/12/12 | 8:35 | 540,000 | 71,000 | 0.459 | 24,786 | 3,259 |
| Hr. 0.50 | 11/12/12 | 8:50 | 560,000 | 220,000 | 1.416 | 79,296 | 31,152 |
| Hr. 1.0 | 11/12/12 | 9:20 | 540,000 | 34,000 | 2.078 | 112,212 | 7,065 |
| Hr. 1.5 | 11/12/12 | 9:50 | 380,000 | 21,000 | 2.094 | 79,572 | 4.397 |
| Hr. 2.0 | 11/12/12 | 10:20 | 26,000 | 17,000 | 1.590 | 4.134 | 2703 |
| Hr. 2.5 | 11/12/12 | 10:50 | 17,000 | 14,000 | 1.136 | 1,931 | 1,590 |
| Hr. 3.0 | 11/12/12 | 11:20 | 28,000 | 19,000 | 1.195 | 3,346 | 2,271 |
| Flow Weighted Average of Grab Samples |  |  |  |  | 10 | 305,380 | 52,441 |

## Appendix E

## Box and Whisker Plots for the National Stormwater Quality Database Version 3

2012 EMC $^{1}$ Comparison with
NSQD v3 ${ }^{2}$ Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

COD

2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots


2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

## Total Phosphorus

2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

## Ammonia

2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

## Fecal Coliform

## 2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots


${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

Hardness

2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots


[^26]Note: No data were collected for 2012 Quarter 1

Oil \& Grease

2012 EMC $^{1}$ Comparison with
NSQD v3² Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

## Cadmium (Cd)

2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

## Chromium (Cr)

## 2012 EMC $^{1}$ Comparison with

 NSQD v3 ${ }^{2}$ Box and Whisker Plots
${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

## Copper (Cu)

2012 EMC $^{1}$ Comparison with
NSQD v3² Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

Lead (Pb)

2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1

Nickel (Ni)
2012 EMC $^{1}$ Comparison with NSQD v3 ${ }^{2}$ Box and Whisker Plots


[^27]Zinc (Zn)

2012 EMC $^{1}$ Comparison with
NSQD v3 ${ }^{2}$ Box and Whisker Plots

${ }^{1}$ Event Mean Concentration
${ }^{2}$ National Stormwater Quality Databnase, Version 3
Note: No data were collected for 2012 Quarter 1


[^0]:    ${ }^{1}$ See Appendix C for detailed summary of Public Education and Outreach activities.

[^1]:    ${ }^{2}$ Appendix E provides a list of local businesses who have committed to take action to reduce stormwater runoff under the GreenSpot program.

[^2]:    ${ }^{3}$ See Appendix F for list of City Council meeting/hearing dates for 2012.

[^3]:    ${ }^{4}$ See Appendix G for addresses of known HSTS that discharge to the City's MS4.

[^4]:    ${ }^{5}$ See Appendix H for training summary of City personnel.
    ${ }^{6}$ See Appendix I for major outfall dry weather screening results.
    ${ }^{7}$ See Section 3.2 for description of illicit discharges identified through dry weather outfall screening.

[^5]:    ${ }^{8}$ Written investigation procedures are included in the City's current Stormwater Management Plan.
    ${ }^{9}$ See Appendix H for training summary of City personnel
    ${ }^{10}$ See Section 3.2 for more information about these investigations.
    ${ }^{11}$ See Appendix J for summary of illicit discharge reports and investigations

[^6]:    ${ }^{12}$ See Section 5.1.1 for summary of illicit discharge enforcement actions taken during reporting period.

[^7]:    ${ }^{13}$ See Appendix K for a list of Erosion and Sediment Control Plans that were reviewed.

[^8]:    ${ }^{14}$ See Appendix H for training summary of City personnel.
    ${ }^{15}$ See Appendix L for construction site visit summary.

[^9]:    ${ }^{16}$ See Section 5.1.2 for summary of construction enforcement actions taken during reporting period.

[^10]:    ${ }^{17}$ See Appendix M for a list of new development and redevelopment construction plans that were reviewed by City staff and included post-construction BMPs.

[^11]:    ${ }^{18}$ Sites where post-construction BMPs were inspected are listed in Appendix N.

[^12]:    ${ }^{19}$ See Appendix O for current list of City facilities that conduct activities having stormwater pollution potential.

[^13]:    ${ }^{20}$ Tier I facilities are defined as those facilities that require coverage under an Industrial Stormwater NPDES permit or No Exposure Certification.
    ${ }^{21}$ See Appendix O for industrial permit numbers for regulated City facilities.
    ${ }^{22}$ Tier II facilities are defined as those facilities that do not require coverage under an Industrial Stormwater NPDES permit or No Exposure Certification but still have the potential to generate stormwater pollution.

[^14]:    ${ }^{23}$ See Appendix P for a current list of sweepers in the City's street sweeping inventory

[^15]:    ${ }^{24}$ See Appendix H for summary of City training sessions conducted this reporting period.

[^16]:    ${ }^{25}$ Industries that cannot show proof of NPDES permit coverage or No Exposure Certification by Ohio EPA or the industrial operator will be classified as
    Category 1 industries. Industries will be classified as Category 2 industries if Ohio EPA or the industrial operator can show proof of coverage under an industrial NPDES permit or no exposure certification by Ohio EPA and discharge to the City's MS4. Once a Category 1 industry obtains permit coverage, the industry will be reclassified as Category 2.
    ${ }^{27}$ See Appendix Q for list of Category 1 Industries,
    ${ }^{27}$ See Appendix $R$ for list of Category 2 Industries.

[^17]:    ${ }^{28}$ High, low, and medium illicit discharge potentials are assigned to each industry based on information provided in Appendix A of the Illicit Discharge and Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments, developed in cooperation with the Center for Watershed Protection and Robert Pitt with the University of Alabama.

[^18]:    ${ }^{29}$ See Appendix R for industrial inspection dates.
    ${ }^{30}$ See Appendix Q for industrial inspection dates.

[^19]:    Like ' Comment ' Share

[^20]:    Columbus Public Utilities shared a link via Neighborhood Pride Columbus (Ohio). November 2, 2012

[^21]:    Yesterday city staff, SWACO and Quasar accepted an Innovation award presented by the Solld Waste Association of North America (SWANA) for our combined efforts to create a facility to accept city sludge from the

[^22]:    Like ' Comment • Share

[^23]:    Like • Comment • Share
    40 people saw this post

[^24]:    Submilted by: DEPIESZALA

[^25]:    nitted by: DEPIESZALA

[^26]:    ${ }^{1}$ Event Mean Concentration
    ${ }^{2}$ National Stormwater Quality Databnase, Version 3

[^27]:    ${ }^{1}$ Event Mean Concentration
    ${ }^{2}$ National Stormwater Quality Databnase, Version 3
    Note: No data were collected for 2012 Quarter 1

