

Thirteenth Quarterly Report

United States Environmental Protection Agency
Administrative Order No. CWA-04-2010-4772

Period
October 1, 2013 –
December 31, 2013

January 2014

Submitted by:



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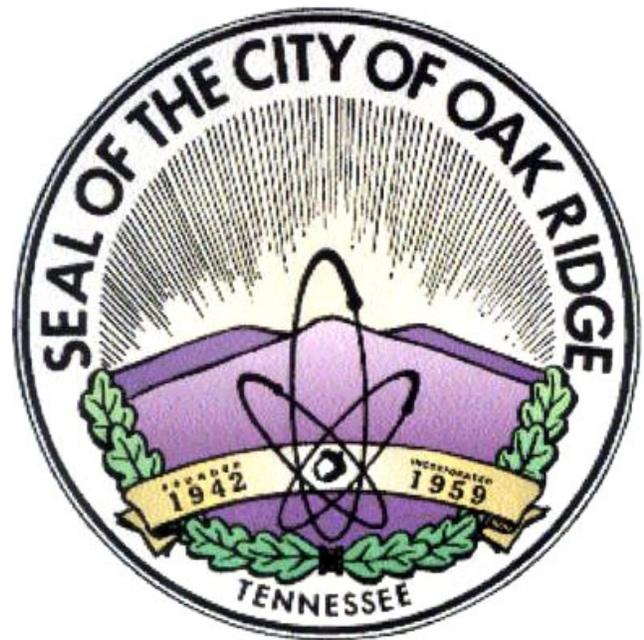
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A.	B&W Y-12 Correspondence



SECTION I:

ACTIONS DURING THE THIRTEENTH QUARTER



SECTION I

ACTIONS DURING THE TENTH QUARTER

A. Introduction

Item 18 of the Administrative Order (AO) requires the City to submit quarterly reports. Those reports are due the 28th day of the month following the end of the quarter. They are to describe actions taken toward achieving compliance with the AO. This section of the report will deal with Management, Operation, Maintenance (MOM) matters, as well as remediation activities.

B. Funding

Oak Ridge City Council action during the tenth quarter included a resolution authorizing the application and acceptance of State Revolving Fund (SRF) loans of \$14.0 million and \$4.0 million at a favorable interest rate, with funds expected to be available during June 2013. Those funds were approved by the State of Tennessee on June 25, 2013. Due to the funding issues, the rehabilitation program became slightly behind schedule; but, with the SRF funds, the program is quickly getting back on the projected schedule. Several planned projects have been combined into larger ones to accelerate the pace of construction for a timely compliance.

The City requested additional SRF funds to complete the work in the Remediation Plan. The State has been as slow in responding to this request as they were with the \$18 million. Those funds must be available early in the fifteenth quarter for the program to remain on schedule.



C. System Evaluation and Rehabilitation Plans

The East Plant Sewer Shed continues to have the highest priority for rehabilitation. Construction has been completed for two (2) mini-basins. During the tenth quarter, three (3) mini-basins which had separate designs were combined into a single construction contract package using the funding approved by the SRF loan program in the eleventh quarter. The remainder of the East Plant Sewershed rehabilitation was designed during the eleventh quarter. The remaining mini-basins (EPIII and EPIV) in the East Plant sewer shed are under construction.

The City has secured for the three equalization basins identified in the rehabilitation plan. Geotechnical investigations have been completed. It is expected that the basin designs will be complete in the fourteenth quarter.

The Emory Valley construction projects are complete and post-construction investigation continues on lateral issues and identifying other defects to be addressed as routine maintenance.

Design is nearly complete for the following sewer sheds: a) Y-12, b) Central City, and c) West End. When the next round of funding is secured, the Turtle Park sewer shed will be designed.



D. Management, Operations, and Maintenance Programs**1. Information Management System**

The Information Management System, Infor, was successfully upgraded from version 8.5 to 10.2 utilizing City personnel during the week of August 19, 2013. As of December 31, 2013 all remaining issues from the upgrade have been resolved.

Pump Stations

- 514 weekly preventive maintenance work orders generated and completed.
- 75 monthly preventive maintenance work orders generated and completed.
- 37 quarterly preventive maintenance work orders generated and completed.
- 4 semi-annual preventive maintenance work orders generated and completed.
- 24 annual preventive maintenance work orders generated and completed.
 - 16 work orders generated by preventive maintenance
- 6 pump station inspection work orders were generated for rain events.
- 27 work orders generated by the maintenance crew (not including PMs, Work from PMs and Rain Events)
- Total-to-date of 5,912 work orders generated in the Infor system for the WWTP maintenance crew.

Gravity Sewer

- As needed training continues.
- Successfully completed the routing of FOG assets, with the routes scheduled and completed in October, November and December.
 - Beginning with the November FOG route, work orders were generated and assigned to Code Enforcement for failed FSE FOG inspections (examples attached)
 - 10 work orders assigned to Code Enforcement for failed FSE FOG inspections (listing attached)



- Continue to refine the process for documenting the SSOs in the Infor system with limited issues.
- 160 work orders generated by the gravity crews (not including Call Center, Routing and Rain Events)
 - 87 MOM work orders
- Total-to-date of 1,856 work orders generated in the Infor system for the gravity crews.

**WORK ORDERS GENERATED FOR FAILED FOG INSPECTIONS
 ASSIGNED TO CODE ENFORCEMENT
 10/1/2013 THROUGH 12/31/2013**

Work Order	Date Created	Description	Problem Address	WO Type	Priority	Asset	Equipment Description
56632	11/20/2013	Failed Fog Inspection, FSE Closed, Market House	80 East Tennessee Avenue	Private	3-Medium (as scheduled)	23830	FOG:I:E7-F17-1(P)
56702	11/22/2013	Failed Fog Inspection, Deans	239 Jackson Square	Private	3-Medium (as scheduled)	23932	FOG:I:E3-E17-1(P)
56701	11/22/2013	Failed Fog Inspection, Subway	880 Oak Ridge Turnpike	Private	3-Medium (as scheduled)	23912	FOG:MH:E3-F17-19
56700	11/22/2013	Failed Fog Inspection, Sonic	210 South Illinois Avenue	Private	3-Medium (as scheduled)	23822	FOG:I:W18 A-H11-2(P)
56695	11/22/2013	Failed Fog Inspection, Kroger	380 South Illinois Avenue	Private	3-Medium (as scheduled)	23847	FOG:I:W18 A-K12-2(P)
58204	1/2/2014	Failed Fog Inspection, Outback Steak	402 South Illinois Avenue	Private	3-Medium (as scheduled)	23844	FOG:I:W18 A-K13-1(P)
58203	1/2/2014	Failed Fog Inspection, Burchfields	215 South Illinois Avenue	Private	3-Medium (as scheduled)	23824	FOG:I:W18 A-H12-3(P)
58202	1/2/2014	Failed Fog Inspection, Methodist Medical Center	990 Oak Ridge Turnpike	Private	3-Medium (as scheduled)	23818	FOG:I:E3-F16-1(P)
58201	1/2/2014	Failed Fog Inspection, Puerto Cancun	299 Oak Ridge Turnpike	Private	3-Medium (as scheduled)	23815	FOG:I:E13A-F21-1(P)



Gravity Sewer, continued

- Manhole smoke testing results provided the needed data to generate work orders for defective cleanouts.
 - 43 work orders generated and assigned to Code Enforcement for defective cleanouts from manhole smoke testing results (see attached example and listing)

**WORK ORDERS GENERATED FROM MANHOLE SMOKE TESTING RESULTS
 DEFECTIVE CLEANOUTS - ASSIGNED TO CODE ENFORCEMENT
 10/1/2013 THROUGH 12/31/2013**

Work Order	Date Created	Description	Status	Problem Address	WO Type	Priority	Assets	Equipment Description
56059	10/28/2013	Cleanout, Broken Assembly	On Hold	300 East Drive	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56060	10/28/2013	Cleanout, Missing Cap	Closed	104 Eaton Lane	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56061	10/28/2013	Cleanout, Broken Assembly	Closed	131 Andover Circle	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56062	10/28/2013	Cleanout, Broken Assembly	On Hold	131 Andover Circle	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56063	10/28/2013	Cleanout, Broken Assembly	Closed	435 East Drive	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56064	10/28/2013	Cleanout, Broken Assembly	Closed	130 Audubon Road	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56065	10/28/2013	Cleanout, Missing Assembly	Closed	321 East Drive	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56066	10/28/2013	Cleanout, Broken Assembly	Closed	120 Arizona Road	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56067	10/28/2013	Cleanout, Broken Assembly And Pipe	Closed	146 Athens Road	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56068	10/28/2013	Cleanout, Broken Pipe	Closed	148 Athens Road	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant



WORK ORDERS GENERATED FROM MANHOLE SMOKE TESTING RESULTS
DEFECTIVE CLEANOUTS - ASSIGNED TO CODE ENFORCEMENT
10/1/2013 THROUGH 12/31/2013

Work Order	Date Created	Description	Status	Problem Address	WO Type	Priority	Assets	Equipment Description
56069	10/28/2013	Cleanout, Broken Assembly	Closed	135 Athens Road	Private	3-Medium (as scheduled)	MB:E12	E12 - East Plant
56070	10/28/2013	Cleanout, Broken Cap	On Hold	103 Clarion Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56071	10/28/2013	Cleanout, Broken Cap	Closed	102 Clarion Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56072	10/28/2013	Cleanout, Broken Cap	Closed	452 East Drive	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56073	10/28/2013	Cleanout, Missing Cap	Closed	176 California Avenue	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56074	10/28/2013	Cleanout, Broken Cap	Closed	109 Chatham Lane	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56075	10/28/2013	Cleanout, Broken Pipe	Closed	131 Arkansas Avenue	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56076	10/28/2013	Cleanout, Missing Cap	Closed	103 Atlanta Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56077	10/28/2013	Cleanout, Broken Pipe	Closed	116 Albany Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56078	10/28/2013	Cleanout, Broken Assembly	Closed	205 Alhambra Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56079	10/28/2013	Cleanout, Broken Assembly	On Hold	98 Arkansas Avenue	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56080	10/28/2013	Cleanout, Broken Assembly	Closed	98 Arkansas Avenue	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56081	10/28/2013	Cleanout, Broken Assembly	Closed	108 East Arrowwood Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant



WORK ORDERS GENERATED FROM MANHOLE SMOKE TESTING RESULTS
DEFECTIVE CLEANOUTS - ASSIGNED TO CODE ENFORCEMENT
10/1/2013 THROUGH 12/31/2013

Work Order	Date Created	Description	Status	Problem Address	WO Type	Priority	Assets	Equipment Description
56082	10/28/2013	Cleanout, Broken Assembly	Closed	112 West Arrowwood Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56083	10/28/2013	Cleanout, Broken Assembly	Closed	10 Apple Lane	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56084	10/28/2013	Cleanout, Broken Pipe	Closed	129 East Arrowwood Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56085	10/28/2013	Cleanout, Broken Assembly	Closed	129 East Arrowwood Road	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56086	10/28/2013	Cleanout, Broken Assembly	Closed	170 Oak Ridge Turnpike	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56087	10/28/2013	Cleanout, Broken Assembly	Closed	170 Oak Ridge Turnpike	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56088	10/28/2013	Cleanout, Broken Assembly	Closed	170 Oak Ridge Turnpike	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56089	10/28/2013	Cleanout, Broken Assembly	Closed	170 Oak Ridge Turnpike	Private	3-Medium (as scheduled)	MB:E11	E11 - East Plant
56156	10/29/2013	Cleanout, Broken Pipe	On Hold	101 South Taube Lane	Private	3-Medium (as scheduled)	MB:W19 A	W19A - Y-12
56158	10/29/2013	Cleanout, Broken Pipe	On Hold	201 North Taube Lane	Private	3-Medium (as scheduled)	MB:W19 A	W19A - Y-12
56160	10/29/2013	Cleanout, Broken Cap	Closed	187 Crossroads Boulevard	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56161	10/29/2013	Cleanout, Broken Cap	Closed	101 Cottage Court	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56162	10/29/2013	Cleanout, Missing Assembly	Closed	196 Crossroads Boulevard	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley



WORK ORDERS GENERATED FROM MANHOLE SMOKE TESTING RESULTS
DEFECTIVE CLEANOUTS - ASSIGNED TO CODE ENFORCEMENT
10/1/2013 THROUGH 12/31/2013

Work Order	Date Created	Description	Status	Problem Address	WO Type	Priority	Assets	Equipment Description
56163	10/29/2013	Cleanout, Broken Cap	Closed	104 Pavillion Drive	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56164	10/29/2013	Cleanout, Broken Pipe	Closed	101 Cobblestone Court	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56165	10/29/2013	Cleanout, Missing Pipe	Closed	185 Crossroads Boulevard	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56166	10/29/2013	Cleanout, Missing Pipe	Closed	153 Crossroads Boulevard	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56167	10/29/2013	Cleanout, Broken Cap	Closed	102 Cove Pointe Lane	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56168	10/29/2013	Cleanout, Missing Assembly	Closed	104 Cove Pointe Lane	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley
56169	10/29/2013	Cleanout, Broken Assembly	Closed	104 Copper Ridge Court	Private	3-Medium (as scheduled)	MB:E37	E37 - Emory Valley

Call Center

- Total-to-date of 4,217 work orders generated in the Infor system by the Call Center.
- 617 work orders generated during this quarter in the Infor system by the Call Center.
 - 31 work orders called in for “Check Sewer Problem”

GIS

The City of Oak Ridge continues to add to and update the GIS mapping system. During this quarter the GIS Specialist worked extensively on completing the sewer asset structure for the far west end of Oak Ridge that is not included in the EPA Administrative Order.



The GIS maps now include the Infor asset number, making it easier for the work crews and office staff when writing work orders and developing routes for work orders utilizing a GIS map.

Work continues on loading approximately 22,000 inspection pictures from 2010 and 2011 that will be linked to the GIS mapping system.

2. Engineering

By-Pass Pumping Connections

By-pass pumping connections will be installed at the remaining four pump stations when they are replaced or updated.

- Palisades #4 Pump Station
 - Preliminary surveying work was completed during this quarter for the replacement of this pump station
- Palisades #1 Pump Station
- Palisades #2 Pump Station
- Palisades #3 Pump Station

Supervisory Control and Data Acquisition (SCADA)

During this quarter, proposals for the purchase and installation of SCADA were received, reviewed and recommended in accordance with the City of Oak Ridge purchasing guidelines. Oak Ridge City Council approved the award of the SCADA components on December 9, 2013 to Industrial Technologies of Calhoun, GA. A purchase order was issued to Industrial Technologies on December 16, 2013 with expected delivery by February 28, 2014. It is planned to spend several weeks installing the components for expected operation by June 30, 2013.

3. Operations

Fats, Oils, and Grease

Quick Stats:

- a. 110 establishments in program (increased by 4 since last report)
- b. 5 remaining FSE Inspections
- c. 12 Establishments found to be non-compliant
- d. 3 FSE required to install grease traps



City of Oak Ridge Program Coordination updates:

- a. 2014 FSE Inspections will follow closely with PW schedule
- b. Continued new building permits to the FOG program for food service establishments (FSE) as certificate of occupancy requirement
- c. Frequent FSE Manager changes continue to cause problems with education and additional inspection follow ups.
- d. Followed up on 9 Public Works-work order for (FOG field inspection failures) – 6 compliant.

Collection

Emory Valley Sewer Shed

- City crews have completed the CCTV work in the Emory Valley Sewer Shed. City crews are going back and reinvestigating privately owned sewer laterals that are suspected of having I&I during heavy rain events. This information is being compiled and will be brought to the attention of the property owners with the assistance of the City Code Enforcement Division. The owners of the privately owned sewer laterals will be shown the problem and consulted in the need of the repair.

Cleaning and CCTV Inspection

- City crews are concentrating on cleaning and CCTV lines that have had previous issues. The goal is to keep these lines clear until the rehab contractor repairs or replaces them. The rehab work is now underway in the East Plant Sewer Shed. City crews have cleaned the problem lines in the East Plant Sewer Shed and will be now concentrating on the Y-12, Central City, Turtle Park and West End sewer sheds until the rehab work is complete in each sewer shed.

Manhole Inspections

- City crews are inspecting manholes in the East Plant Sewer Shed as contractors finish rehab work in designated mini systems.
- E11 has been completed.
- E12 is a third of the way completed.



Flow Monitoring

- City personnel continue to monitor the sewer flows during rain and dry weather.
- There are currently fifteen (15) flow meters strategically located throughout the city. The Emory Valley Sewer Shed has flow meters installed for post construction flow monitoring, and some of the East Plant Sewer Shed flow meters have been removed for construction but will be reinstalled for post construction flow monitoring.

Rain Gauges

- The three (3) rain gauges are recording rainfall data in the East, West and Center of the city. The central rain gauge being at the Water Treatment Plant is the primary used to call rain events of 0.5" or more.

Rain Events

- For this quarter the city of Oak Ridge has had a total of six (6) rain events totaling .5" or more of rain.

Rainfall Data,

- Monthly rainfall amounts for the City of Oak Ridge recorded at the Water Treatment Plant for this quarter.
 - October 0.60"
 - November 4.44"
 - December 7.32"

SSO's

- 17- SSO's during this quarter
 - 16 - wet weather overflows
 - 1 - dry weather overflows



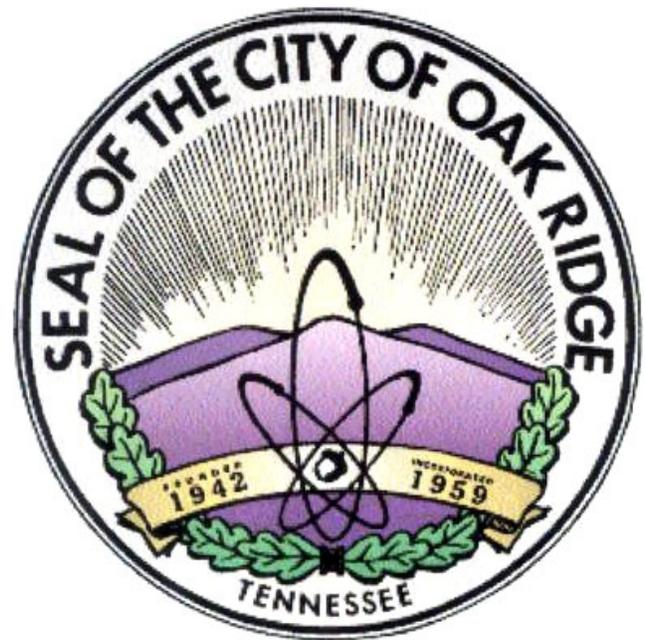
Safety Training

- All Public Works employees attend monthly safety meetings.
- This quarter topics were
 - October – PPE and Fall Safety
 - November – Review of New Requirements for Hazard Communications
 - December – Winter Safety Tips
- Six (6) employees attended NASSCO training and received certification in Pipe, Manhole and Lateral inspection. PACP, MACP and LACP. The employees are:
 - Rick Irwin
 - Roger Flynn
 - Trevor Gallaher
 - Brian Simmons
 - Brian Gartman
 - Mark Daniels



SECTION II:

**OTHER GENERAL
COMMENTS**



SECTION II

OTHER GENERAL COMMENTS

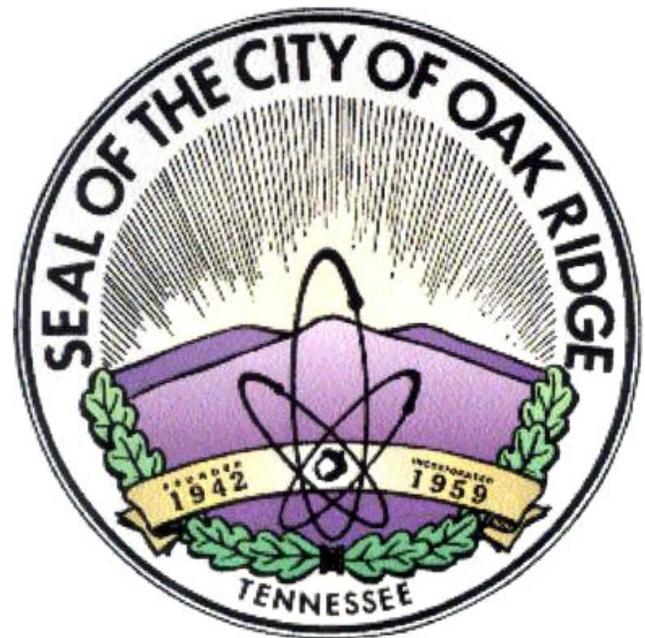
The City and EPA have had discussions concerning the National Nuclear Security Administration's (NNSA) Y-12 facility. The City recognizes they own the collection system and hold the NPDES permit. However, the Y-12 facility (an independent customer) operates at a level higher than city or state government. That facility, from a practical perspective, is not the same as any other industrial customer with a service lateral.

A letter from B&W Y-12 indicating no activity relative to I/I reduction occurred during the quarter is Appendix A.



SECTION III:

**SSO'S DURING
THIRTEENTH QUARTER**



EPA Sanitary Sewer Overflow Summary (See Attached SSO Reports for Details)

13th Quarterly Report - October 1, 2013 to December 31, 2013

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
12/6/2013	Jefferson Avenue	215	33500	Ran root saw and removed 2 root balls	City will clean and CCTV for possible problems	<input checked="" type="checkbox"/>	East Fork Poplar Creek
12/22/2013	Cairo Lane	151	91000	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Ernie's Creek
12/22/2013	Dresden Road	100	59700	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Ernie's Creek
12/22/2013	Grandcove Lane	114	22500	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	East Fork Poplar Creek
12/22/2013	Illinois Avenue, South	216	144000	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	East Fork Poplar Creek
12/22/2013	Iroquois Road		12750	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	East Fork Poplar Creek
12/22/2013	Melton Lake Drive	695	73000	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Melton Hill Lake
12/22/2013	Mohawk Road	105	9500	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	East Fork Poplar Creek
12/22/2013	Oak Ridge Turnpike	1289	22500	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Tributary to East Fork Poplar Creek
12/22/2013	Oak Ridge Turnpike	1403	24250	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Tributary to East Fork Poplar Creek
12/22/2013	Oak Ridge Turnpike	1403	12125	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Tributary to East Fork Poplar Creek
12/22/2013	Oak Ridge Turnpike	1403	180000	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Tributary to East Fork Poplar Creek
12/22/2013	Oak Ridge Turnpike	470	14500	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Ernie's Creek
12/22/2013	Oak Ridge Turnpike	535	120000	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Ernie's Creek
12/22/2013	Purdue Avenue, North	117	220000	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	Tributary to East Fork Poplar Creek
12/22/2013	Robertsville Road	270	8500	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	East Fork Poplar Creek

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
12/22/2013	Tusculum Drive	191	22000	Excessive rainfall of 1.77" rain in 10 hrs.	City continues work to correc I&I	<input checked="" type="checkbox"/>	East Fork Poplar Creek

CITY OF OAK RIDGE

REPORT DATE: 12/9/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 215 Jefferson Ave.

7/7/13 1st Occurrence at this location? Y N
If No, Date of Last Occurrence: 7/9/2013 KS

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # W12 Map Page # D9 Manhole # D9-6

Force Main:

FLOW DATA

Start Date: 12/6/2013 Time: 6:31 AM PM End Date: 12/6/2013 Time: 8:45 AM PM

Duration 2 hrs. 14 min. hours/minutes Est. Flow Rate: 250 gpm Estimated Total Flow: 33,500 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.45 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Ran root saw and removed 2 root balls.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City will clean and CCTV for possible problems.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Brian Simmons, Mike Brown, Jeremy Justice

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/9/13

Reviewed by Kick Eason Title: Operations & Maint. Manager Date: 12/10/13

Initial TDEC Notification By: David Patterson Date: 12/6/13

After Review & Scott Jackson Title: Operations Manager Date: 12-10-13
Notification to TDEC

Final Review [Signature] Title: Public Works Director Date: 12/10/13

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/11/13

LOCATION: 151 Cairo Ln. 1st Occurrence at this location? Y N
If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup Pump Station Name: None or None or None
If Manhole; Give Mini-system # E13B Map Page # G22 Manhole # E13B-G22-14 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 7:02 AM PM End Date: 12/22/2013 Time: 5:10 AM PM
Duration 10 hrs. 8 min. hours/minutes Est. Flow Rate: 150 gpm Estimated Total Flow: 91,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure
Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: Ernies Creek
Ran on/in: Ground & absorbed into soil Ditch Storm Sewer
Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Scott Johnson Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

LOCATION DATA

LOCATION: 100 Dresden Rd. 1st Occurrence at this location? Y [] N [x]
If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole [x] Clean Out [] In-House Backup [] Pump Station Name: None or None or None
If Manhole; Give Mini-system # E13A Map Page # F20 Manhole # E13A-F20-36 Force Main: []

FLOW DATA

Start Date: 12/22/2013 Time: 7:18 AM [x] PM [] End Date: 12/22/2013 Time: 5:15 AM [] PM [x]

Duration 9 hrs. 57 min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 59,700 gallons

CAUSES (Check all that apply)

Rainfall [x] [Estimated amount 1.77 in] Power Outage [] Equipment Failure []
Broken Sewer [] Blocked line from Roots [] Grease [] Collapse [] Other []

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded [] Nozzle [] Root Saw [] Lid Removed [] Lined [x] Equipment Repair []
Line will be: cleaned and TV'd for needed repair: [] Other: City continues work to correct i&l

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes [x] No [] Name of surface water: Ernie's Creek
Ran on/in: Ground & absorbed into soil [] Ditch [x] Storm Sewer []
Basement Back-up [] No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes [] No [x] How: City Web Site [] The Oak Ridger [] Signs Posted [] Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maintenance Specialist Date: 12/23/13

Reviewed by Title: Date:

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-23-13

Final Review Title: Public Works Director Date:

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

CITY OF OAK RIDGE

REPORT DATE: 12/23/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 114 Grandcove Ln.

1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/7/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # W27 Map Page # E3W

Manhole # W27-E3W-9 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 9:55 AM PM End Date: 12/22/2013 Time: 5:20 AM PM

Duration 7 hrs. 25 min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 22,500 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in]

Power Outage

Equipment Failure

Broken Sewer

Blocked line from Roots

Grease

Collapse

Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No

Name of surface water: East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements

Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Scott Pachon Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

CITY OF OAK RIDGE

REPORT DATE: 12/23/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 216 S. Illinois Ave.

1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # W18A Map Page # J11

Manhole # W18A-J11-16

Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 9:05 AM PM End Date: 12/22/2013 Time: 5:05 AM PM

Duration 8 hrs. hours/minutes Est. Flow Rate: 300 gpm Estimated Total Flow: 144,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Senior Maint. Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Scott Jackson Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

LOCATION DATA

LOCATION: Iroquois Rd. @ Robertsville Rd. 1st Occurrence at this location? Y [] N [x]
If No, Date of Last Occurrence: 7/7/2013

POINT OF OCCURENCE

Manhole [x] Clean Out [] In-House Backup [] Pump Station Name: None or None or None
If Manhole; Give Mini-system # W18D Map Page # E10 Manhole # W18D-E10-19 Force Main: []

FLOW DATA

Start Date: 12/22/2013 Time: 9:20 AM [x] PM [] End Date: 12/22/2013 Time: 4:25 AM [] PM [x]
Duration 7 hrs. 5 Min. hours/minutes Est. Flow Rate: 30 gpm Estimated Total Flow: 12,750 gallons

CAUSES

(Check all that apply)

Rainfall [x] [Estimated amount 1.77 in] Power Outage [] Equipment Failure []
Broken Sewer [] Blocked line from Roots [] Grease [] Collapse [] Other []

Explain causes of overflow: Excessive rainfall 1.77" in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded [] Nozzle [] Root Saw [] Lid Removed [] Lined [] Equipment Repair []
Line will be: cleaned and TV'd for needed repair: [] Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes [x] No [] Name of surface water: East Fork Poplar Creek
Ran on/in: Ground & absorbed into soil [] Ditch [] Storm Sewer [x]
Basement Back-up [] No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes [] No [x] How: City Web Site [] The Oak Ridger [] Signs Posted [] Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint Specialist Date: 12/23/13

Reviewed by Title: Date:

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-23-13

Final Review Title: Public Works Director Date:

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

CITY OF OAK RIDGE

REPORT DATE: 12/23/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 695 Melton Lake Dr.

1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # E20 Map Page # L24

Manhole # E20-L24-1 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 10:55 AM PM End Date: 12/22/2013 Time: 5:00 AM PM

Duration 6 hrs. 5 min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 73,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: Melton Hill Lake

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Senior Maint. Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Kathy Stout Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

LOCATION DATA

LOCATION: 105 Mohawk Rd. 1st Occurrence at this location? Y [X] N []

If No, Date of Last Occurrence:

POINT OF OCCURENCE

Manhole [X] Clean Out [] In-House Backup [] Pump Station Name: None or None or None

If Manhole; Give Mini-system # W16 Map Page # C3 Manhole # W16-C3-23 Force Main: []

FLOW DATA

Start Date: 12/22/2013 Time: 12:15 AM [] PM [X] End Date: 12/22/2013 Time: 1:50 AM [] PM [X]

Duration 1hr. 35 min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 9,500 gallons

CAUSES

(Check all that apply)

Rainfall [X] [Estimated amount 1.77 in] Power Outage [] Equipment Failure [] Broken Sewer [] Blocked line from Roots [] Grease [] Collapse [] Other []

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded [] Nozzle [] Root Saw [] Lid Removed [] Lined [] Equipment Repair []

Line will be: cleaned and TV'd for needed repair: [] Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes [X] No [] Name of surface water: East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil [] Ditch [] Storm Sewer [X]

Basement Back-up [] No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes [] No [X] How: City Web Site [] The Oak Ridger [] Signs Posted [] Date:

Names of Responders: Todd Baker, Doug Farmer

Report completed by: Todd Baker Title: specialist Date: 12/23/13

Reviewed by: Title: Date:

Initial TDEC Notification By: Todd Baker Date: 12/23/13

After Review & Notification to TDEC By: Scott Jackson Title: Operations Manager Date: 12-23-13

Final Review Title: Public Works Director Date:

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

CITY OF OAK RIDGE

REPORT DATE: 12/23/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1289 Oak Ridge Turnpike

1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G13

Manhole # W5-G13-12 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 8:30 AM PM End Date: 12/22/2013 Time: 4:00 AM PM

Duration 7 hrs. 30 min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 22,500 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in]

Power Outage

Equipment Failure

Broken Sewer

Blocked line from Roots

Grease

Collapse

Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No

Name of surface water: Tributary to East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements

Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Kathy Stout Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

LOCATION: 1403 Oak Ridge Turnpike LOCATION DATA 1st Occurrence at this location? Y [] N [x]

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole [x] Clean Out [] In-House Backup [] Pump Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # W5-G12-2 Force Main: []

FLOW DATA

Start Date: 12/22/2013 Time: 8:45 AM [x] PM [] End Date: 12/22/2013 Time: 4:50 AM [] PM [x]

Duration 8 hrs. 5 min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 24,250 gallons

CAUSES

(Check all that apply)

Rainfall [x] [Estimated amount 1.77 in] Power Outage [] Equipment Failure [] Broken Sewer [] Blocked line from Roots [] Grease [] Collapse [] Other []

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded [] Nozzle [] Root Saw [] Lid Removed [] Lined [x] Equipment Repair []

Line will be: cleaned and TV'd for needed repair: [] Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes [x] No [] Name of surface water: Tributary to East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil [] Ditch [x] Storm Sewer []

Basement Back-up [] No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes [] No [x] How: City Web Site [] The Oak Ridger [] Signs Posted [] Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/23/13

Reviewed by Title: Date:

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Notification to TDEC Scott Johnson Title: Operations Manager Date: 12-23-13

Final Review Title: Public Works Director Date:

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

CITY OF OAK RIDGE

REPORT DATE: 12/23/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1403 Oak Ridge Turnpike

1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G12

Manhole # W5-G12-1 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 8:40 AM PM End Date: 12/22/2013 Time: 4:45 AM PM

Duration 8 hrs. 5 min. hours/minutes Est. Flow Rate: 25 gpm Estimated Total Flow: 12,125 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in]

Power Outage

Equipment Failure

Broken Sewer

Blocked line from Roots

Grease

Collapse

Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No

Name of surface water: Tributary to East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements

Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Kathy Stout Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

CITY OF OAK RIDGE

REPORT DATE: 12/23/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1403 Oak Ridge Turnpike

1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G11

Manhole # W5-G11-8 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 8:35 AM PM End Date: 12/22/2013 Time: 4:05 AM PM

Duration 7 hrs. 30 min. hours/minutes Est. Flow Rate: 400 gpm Estimated Total Flow: 180,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: Tributary to East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Senior Maint. Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Kathy Stout Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

LOCATION: 470 Oak Ridge Turnpike
LOCATION DATA
1st Occurrence at this location? Y N
If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE
Manhole Clean Out In-House Backup Pump Station Name: None or None or None
If Manhole; Give Mini-system # E10 Map Page # F20 Manhole # E10-F20-16 Force Main:

FLOW DATA
Start Date: 12/22/2013 Time: 7:50 AM PM End Date: 12/22/2013 Time: 5:30 AM PM
Duration 9 hrs. 40 min. hours/minutes Est. Flow Rate: 25 gpm Estimated Total Flow: 14,500 gallons

CAUSES
(Check all that apply)
Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure
Broken Sewer Blocked line from Roots Grease Collapse Other
Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES
Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)
Did flow run to surface water: Yes No Name of surface water: Ernie's Creek
Ran on/in: Ground & absorbed into soil Ditch Storm Sewer
Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)
Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan
Report completed by David Patterson Title: Senior Maint. Supervisor Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13
After Review & Katt Jackson Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23/13

LOCATION: 535 Oak Ridge Turnpike LOCATION DATA 1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup Pump Station Name: None or None or None

If Manhole; Give Mini-system # E13A Map Page # G20 Manhole # E13A-G20-27 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 7:25 AM PM End Date: 12/22/2013 Time: 5:25 AM PM

Duration 10 hrs. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 120,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure
Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: Ernies Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-23-13

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

CITY OF OAK RIDGE

REPORT DATE: 12/23/2013

SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 117 N. Purdue Ave.

1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup

Pump Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G15

Manhole # W5-G15-13 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 8:20 AM PM End Date: 12/22/2013 Time: 5:30 AM PM

Duration 9 hrs. 10 min. hours/minutes Est. Flow Rate: 400 gpm Estimated Total Flow: 220,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in]

Power Outage

Equipment Failure

Broken Sewer

Blocked line from Roots

Grease

Collapse

Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No

Name of surface water: Tributary to East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil

Ditch

Storm Sewer

Basement Back-up No. of basements

Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No

How: City Web Site

The Oak Ridger

Signs Posted

Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson

Title: Sewer Main Specialist

Date: 12/23/13

Reviewed by _____

Title: _____

Date: _____

Initial TDEC Notification

By: David Patterson

Date: 12/22/13

After Review & Scott Jackson

Notification to TDEC

Title: Operations Manager

Date: 12-23-13

Final Review _____

Title: Public Works Director

Date: _____

Final Report Transmitted to TDEC

By: Kathy Stout

Date: 12-23-13

LOCATION: 270 Robertsville Rd. LOCATION DATA
1st Occurrence at this location? Y N

If No, Date of Last Occurrence: 7/7/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup Pump Station Name: None or None or None
If Manhole; Give Mini-system # W10 Map Page # E10 Manhole # W10-E10-20Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 9:15 AM PM End Date: 12/22/2013 Time: 4:20 AM PM

Duration 7 hrs. 5 min. hours/minutes Est. Flow Rate: 20 gpm Estimated Total Flow: 8,500 gallons

CAUSES
(Check all that apply)

Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure
Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: East Fork Poplar Creek

Ran on/in: Ground & absorbed into soil Ditch Storm Sewer

Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Senior Maint. Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: david Patterson Date: 12/22/13

After Review & Scott Jackson Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

LOCATION DATA

LOCATION: 191 Tusculum Dr. 1st Occurrence at this location? Y N
If No, Date of Last Occurrence: 7/6/2013

POINT OF OCCURENCE

Manhole Clean Out In-House Backup Pump Station Name: None or None or None
If Manhole; Give Mini-system # W19 Map Page # H11 Manhole # W19-H11-4 Force Main:

FLOW DATA

Start Date: 12/22/2013 Time: 9:10 AM PM End Date: 12/22/2013 Time: 4:30 AM PM
Duration 7 hrs. 20 min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 22,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 1.77 in] Power Outage Equipment Failure
Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 1.77" rain in 10 hrs.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Lined Equipment Repair
Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes No Name of surface water: East Fork Poplar Creek
Ran on/in: Ground & absorbed into soil Ditch Storm Sewer
Basement Back-up No. of basements Use (i.e., commercial, residential)

Other (describe)

Notified Public: Yes No How: City Web Site The Oak Ridger Signs Posted Date:

Names of Responders: David Patterson, Cade Mcmillan

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/23/13

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: David Patterson Date: 12/22/13

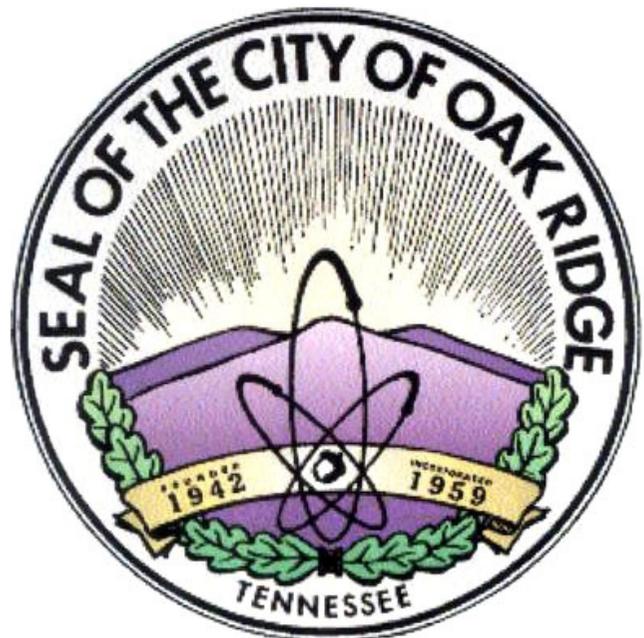
After Review & Scott Johnson Title: Operations Manager Date: 12-23-13
Notification to TDEC

Final Review _____ Title: Public Works Director Date: _____

Final Report Transmitted to TDEC By: Kathy Stout Date: 12-23-13

APPENDIX A:

B&W Y-12 CORRESPONDENCE





hear creek road • po. box 2009 • oak ridge, tn 37831-8111
phone: 865 211 8319 • fax 865 211 4535 • www.y12.doe.gov

4th Q 2013

No violation other than flow exceedance ✓

CCN201471860

January 15, 2014

Mr. Ken Glass, Environmental/Regulatory Compliance Coordinator
Public Works Department
City of Oak Ridge
Post Office Box 1
Oak Ridge, Tennessee 37831

Dear Mr. Glass:

Y-12 National Security Complex Sanitary Sewer Monitoring Data—Oak Ridge Sewer Use Ordinance (Permit 1-91)—Fourth Quarter Calendar Year 2013

As required by the Industrial and Commercial User Waste Water Discharge Permit 1-91, samples were obtained at the East End Sanitary Sewer Monitoring Station at the Y-12 National Security Complex throughout the fourth calendar quarter of 2013. The East End Sanitary Sewer Monitoring Station samples were analyzed and the resulting data are reported in Enclosure 1 for the months of October, November and December 2013. Enclosure 2 contains the signed Industrial Self-Analysis Form. Data for soluble versus insoluble uranium concentrations are summarized in Enclosure 3. Enclosure 4* contains the quality assurance data generated during this period. Enclosure 5 contains analytical data for the Industrial Landfill V leachate sample for the fourth quarter, as submitted by the operating contractor for Industrial Landfill V. Monthly uranium loading values are calculated and presented in Enclosure 6. Enclosure 7 contains the analytical data of a sample collected from the Siltec silver extraction unit located in Y-12 Photography.

There are no updates to provide for this quarter regarding actions taken to reduce storm water inflow and infiltration into the sanitary sewer system.

The operating contractor for the Y-12 landfills previously indicated they may begin introducing waste into the lined portion of Landfill IV during the fourth quarter of 2013. This did not happen as expected; the start date is now sometime during the first quarter of 2014. Plans are to require the same sampling protocol currently in place for Landfill V with the data being reported accordingly.

I certify under penalty of law that this document and all enclosures were prepared under my direction or supervision, in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system,

* Filed separately

Mr. Ken Glass
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January 15, 2014

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.

If you have any questions, please contact Stacey E. McNamara, 576-9657, or Leonard O. Vaughan, 576-8108, of my staff.

Sincerely yours,



Yvonne M. Bishop
Acting Vice President
Environment, Safety and Health

YMB:bjs

Enclosures: As stated

cc/enc: J. P. Donnelly, NPO Y-12
J. A. Owsley, TDEC/DOE-ORO
J. Zanger, NPO PX
NPO-Correspondence@npo.doe.gov

cc: S. D. Morris, NPO Y-12
T. M. Robbins, NPO Y-12