Fifth Quarterly Report

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

Period
October 1, 2011 –
December 31, 2011

January 2012

Submitted by:

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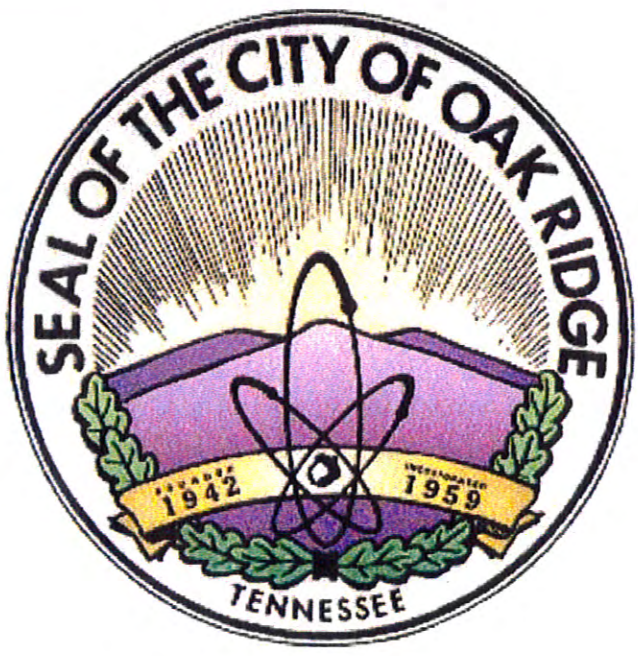
SECTION I:

OVERVIEW OF ORDER



SECTION I

OVERVIEW OF ORDER

On September 28, 2010, an Administrative Order issued by the United States Environmental Protection Agency (EPA) to the City of Oak Ridge, which was received on September 30, 2010. The Order cited numerous incidents of Sanitary Sewer Overflows (SSO's). The Order had four (4) general sections outlining activities required of the City with a defined schedule for compliance. Those areas are as follows:

Sanitary Sewer Overflows

Within two (2) months (November 30, 2010), a list of SSO's which occurred in the previous two years, were required to be submitted. That list was submitted on time.

System Evaluation and Rehabilitation Plans (SERP)

Within six (6) months (March 30, 2011), the City was to develop work plans for Capacity Assessment of the system and a Sewer System Evaluation Survey (SSES). Following the Capacity Assessment Work Plan, the City must develop a Capacity Assessment Report in accordance with the work plan. That report is due for submittal to the EPA within one year of approval of the work plan. The execution of the SSES work plan must be completed within

one year of approval. The results of the evaluation survey must be submitted within two (2) months after completion of the survey. Two (2) months following the results, a Remediation Plan must be submitted for review and approval. Both the Capacity Work Plan and the Sewer System Evaluation Survey (SSES) work plan were approved by the EPA during the third quarter of the A.O.

Sanitary Sewer Overflow Response Plan (SORP)

Within six (6) months (Second Quarter), the City shall prepare and submit a Response Plan detailing procedures to be taken relative to any overflows occurring in the sewer system. The SORP was approved by EPA during the third quarter of the A.O.

Management, Operation, and Maintenance Programs (MOM

The MOM portion of the Order has many components. The general topics are as follows:

- Information Management System (IMS) Programs
- Engineering
- Pump Station Operations Programs
- Maintenance Programs

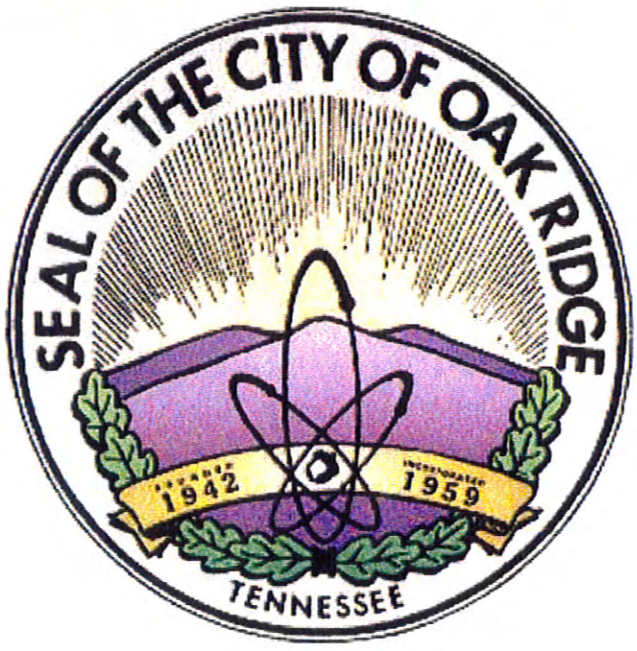
The schedule for submittals varies for the different components of the MOM portion of the Order. The sections which were due have been submitted.

In addition to the above referenced requirements of the Order, the City must submit quarterly reports to the EPA documenting the activities of the quarter. These reports are due on the 28th day of the month following the end of each quarter. The Order outlines the format of these reports. The first four quarterly reports were submitted on time.

Section II of this report addresses the activities of the fifth quarter after receipt of the Order.

SECTION II:

ACTIONS DURING THE FIFTH QUARTER



SECTION II

ACTIONS DURING THE FIFTH QUARTER

A. Activities of the Old Program

In 1991, the City of Oak Ridge began a program to eliminate overflows at the influent pumping station at the wastewater treatment plant. That program was to expand the hydraulic capacity of the wastewater treatment plant and reduce infiltration/inflow (I/I) in the system. Prior to the issuance of the Order, the treatment plant capacity was expanded to 30.0 million gallons per day (MGD). Sewer rehabilitation projects have been designated by letters. Contracts through "N" have been constructed.

During the fifth quarter, work under the "old program" continued. Two rehabilitation projects were placed under construction during the fifth quarter. These projects were in the Emory Valley Sewer Shed. Construction will continue into the sixth quarter.

B. Fifth Quarter Activities Relative to the Order

The investigative work in the system relative to closed circuit television (CCTV) using in-house personnel and equipment was completed during the fifth quarter.

The City used contract cleaning and CCTV work to augment the City's in-house resources in order to complete the work so that the data can be used in both the Capacity Assessment Report and the SSES.

Smoke testing continued during the fifth quarter in the mini-basins shown below:

Smoke Tested
W3
W4
W13
W18A

Smoke data activities during the fifth quarter were basically a quality control program.

During the fifth quarter, there were 257 manholes inspected. There remain 6 manholes to be inspected. These manholes are covered requiring extraordinary efforts to locate and inspect.

Lamar Dunn & Associates, Inc. (LD&A) continues to assist the City with various tasks required by the Order.

The Order requires a GIS program. During the fifth quarter, the GIS program continued to be populated with data from field investigative work.

Item 16D(i) of the Order requires the City to submit an information Management System Programs. The IMS program was submitted to the EPA before the due date. During the fifth quarter, the City staff has worked with INFOR, the vendor of the IMS software, toward implementation. The maintenance crews began training on the INFORM system in December with the expectation that they would go live in early January. The Administrative personnel began inputting call-in requests in early December. It is clear that the IMS will save employee time. It is projected that the field crews will begin receiving call-in work orders via text message and email during the sixth quarter.

The City is collecting rainfall data from three (3) rain gauges. Flow monitoring equipment is in place with data being collected for both the Capacity Assessment Report and the SSES.

As the computerized model of the collection system is being built, it has been determined that certain information is inconsistent in the sewer record drawings. During the fifth quarter, a survey crew has been confirming invert elevations of manholes. Flow data continues to be loaded into the model.

The city has identified five design firms and notified them of their selection. Proposals have been received from each. It is expected that contracts and authorizations will be issued during the sixth quarter.

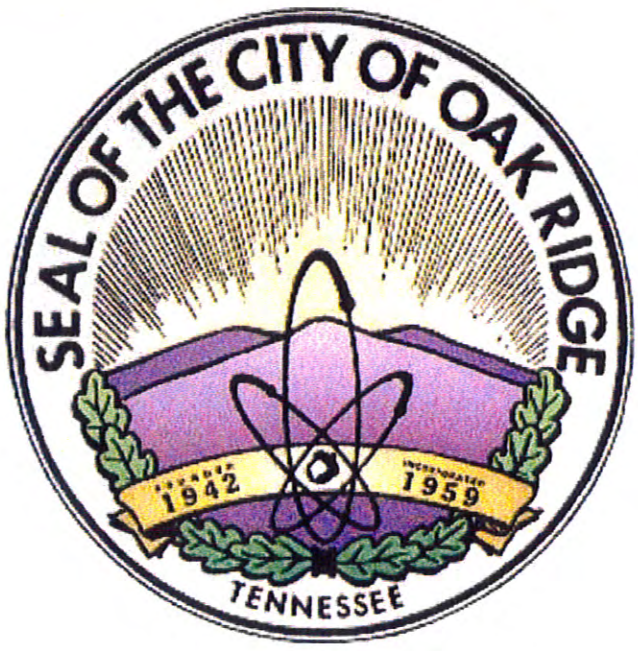
On the last day of the fourth quarter, a "point repair" contract was executed to repair situations that could not wait until a large rehabilitation program was contracted. In the early days of the fifth quarter, an authorization was given for nine (9) locations of repair by that contractor.

The City is continuing to upgrade its wastewater pumping stations. Several stations do not have auxiliary power. Provisions for "pump arounds" are being made. A request for bids of pumps was issued in the fifth quarter. Bids were taken for new control panels which will provide SCADA access to these smaller stations. The panels are to be installed by City staff.

The City continues to have discussions with the Department of Energy (DOE) personnel. Section III and Appendix CB provide more insight to the DOE issues.

SECTION III:

OTHER GENERAL COMMENTS SSO's DURING FIFTH QUARTER



SECTION III

OTHER GENERAL COMMENTS

The City has been extremely active over the first fifth quarters of the Administrative Order. To date, all requirements have been met both for content and timeliness.

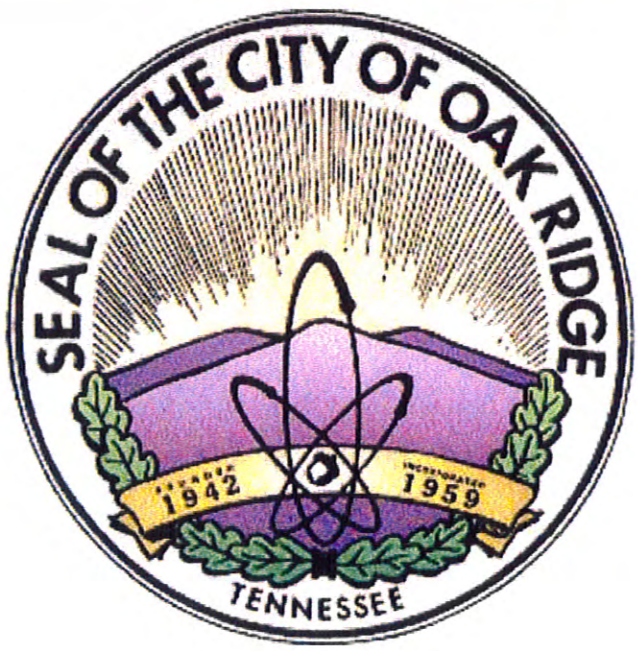
In the first quarterly report, mention was made of a conference call between the City and EPA concerning the National Nuclear Security Administration's (NNSA) Y-12 facility. In the second, third, and fourth quarterly reports, Y-12 was mentioned again.

There remains a concern by the City that the magnitude and complexity of the Y-12 matter is not fully understood by EPA. As stated in earlier reports, the next phase of the enforcement activities of EPA should consider the ramifications of that flow component.

It is recognized by the City that they own their collection system and hold its permit. However, the Y-12 facility 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. The Y-12 matter should be thoroughly reviewed by the parities prior to finalization of any civil penalties. This situation is one where the City and EPA should cooperate to affect a timely solution to the matter. Appendix B provides activities of DOE as they perceive the infiltration/inflow issue. Also included in their report is other data relative to their discharge permit.

SECTION IV:

SSO's DURING FIFTH QUARTER



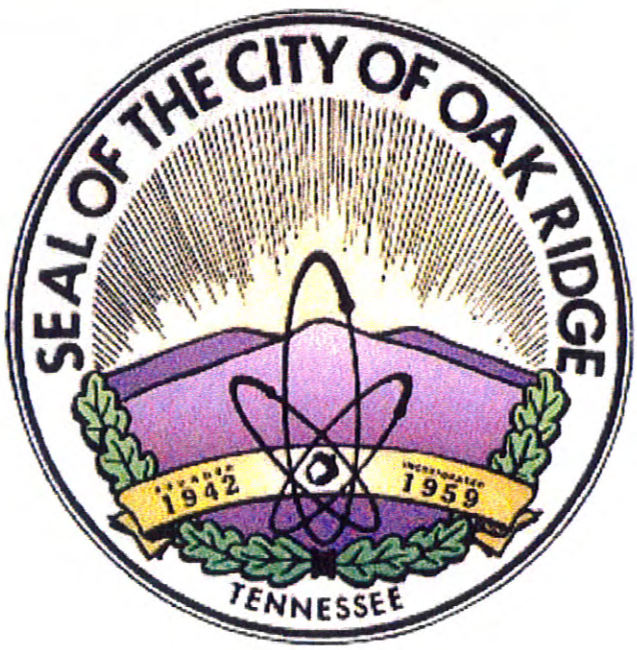
SECTION IV

SSO's DURING FIFTH QUARTER

During the fifth quarter, there were five (5) storm events. Appendix A contains the report sheets for each overflow that occurred during the fifth quarter for whatever the reason. These sheets meet the criteria set forth in Section 18 of the Order, which includes:

- Date of event
- Specific location
- Estimated flow rate
- Time event started and finished
- Estimated total flow volume
- Rainfall event (in/day)
- Discharge destination

APPENDIX A: SSO'S REPORT SHEETS FOR FIFTH QUARTER



EPA Sanitary Sewer Overflow Summary (See Attached SSO Reports for Details)
5th Quarterly Report - October 1, 2011 to December 31, 2011

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
10/3/2011	West Outer Drive	1090	1	Contractor cleaning the city's sewer main blew water out of the toilet.	Contractor offered to clean up the spill, but the homeowner refused any assistance	☐	
10/3/2011	West Outer Drive	1092	1	Contractor cleaning the city's sewer main blew water out of the toliet	Homeowner cleaned up the spill before the contractor arrived to help . Homeonwer didn't report the incident until 9:00 am on 10/4/2011	☐	
10/7/2011	Beverly Circle	109	1	Contractor cleaning the city's sewer main blew water out of the toliet	Homeowner cleaned up the spill	☐	
10/19/2011	Melton Lake Drive	695	19100	Esitamted 2" of rainfall	City continues work to correct I&I	☑	Melton Hill Lake
10/19/2011	Purdue Avenue, North	117	1000	Evidence of overflow found at 9:58 am, estimated 2" of rainfall	City continues work to correct I&I	☑	East Fork Poplar Creek
10/25/2011	Scarboro Road		5000	Break on cast iron sewer force main. (Exact location of occurrence, Scarboro Road 1008' south of Cheaspeak Dr.) Previous occurrence on 3/15/11 was located 560' south of Chesapeke Drive	Force main was repaired	☐	
11/16/2011	Athens Road		41000	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Tributary to Melton Hill Lake
11/16/2011	Athens Road	119	40800	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Tributary to Melton Hill Lake

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
11/16/2011	Bay Path Drive	108	6500	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Emory Valley Creek
11/16/2011	Belgrade Road		11250	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Ernie's Creek
11/16/2011	Cairo Lane	151	14300	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Ernie's Creek
11/16/2011	Dresden Road	100	22900	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Tributary to Ernie's Creek
11/16/2011	Illinois Avenue, South	216	80500	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	East Fork Poplar Creek
11/16/2011	Illinois Avenue, South	324	3300	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	East Fork Poplar Creek
11/16/2011	Iroquois Road		15700	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	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
11/16/2011	Jefferson Avenue	215	2000	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/16/2011	Melton Lake Drive	695	26900	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Melton Hill Lake
11/16/2011	Monterey Road		165000	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	East Fork Poplar Creek
11/16/2011	Newkirk Lane, West	116	19000	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Triibutary to Ernie's Creek
11/16/2011	Oak Ridge Turnpike	1289	13600	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/16/2011	Oak Ridge Turnpike	1403	6000	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/16/2011	Oak Ridge Turnpike	1403	6150	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	☑	Tributary to 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
11/16/2011	Oak Ridge Turnpike	1403	122500	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	✔	Tributary to East Fork Poplar Creek
11/16/2011	Oak Ridge Turnpike	470	39600	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	✔	Tributary to Ernie's Creek
11/16/2011	Oak Ridge Turnpike	535	44400	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	✔	Ernie's Creek
11/16/2011	Providence Road	110	4600	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	✔	Tributary to East Fork Poplar Creek
11/16/2011	Purdue Avenue, North	117	182500	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	✔	East Fork Poplar Creek
11/16/2011	Robertsville Road	270	1000	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	✔	East Fork Poplar Creek
11/16/2011	Tusculum Drive	191	16000	Excessive rainfall of 3.02 inches over a 2 day period, 1.5 inches of the total fell in a 2 hour period (12pm-2pm 11/16/11) causing severe flooding.	City continues work to correct I&I	✔	East Fork Poplar Creek
11/22/2011	Athens Road	119	14600	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	Tributary to Melton Hill Lake

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
11/22/2011	Bay Path Drive	108	19100	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	Emory Valley Creek
11/22/2011	Cairo Lane	151	17000	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	Ernie's Creek
11/22/2011	Illinois Avenue, South	216	5000	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	East Fork Poplar Creek
11/22/2011	Jefferson Avenue	215	75	Excessive rainfall 2.06" rain in 24 hour period and line blocked by rags		✔	East Fork Poplar Creek
11/22/2011	Melton Lake Drive	695	40600	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	Melton Hill Lake
11/22/2011	Monterey Road		90000	Excessive rainfall 2.06" rain in 24 hour period, combined with problems with one of the pumps at Turtle Park	City continues work to correct I&I and pump at Turtle Park will be repaired	✔	East Fork Poplar Creek
11/22/2011	Oak Ridge Turnpike	1403	12000	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	Tributary to East Fork Poplar Creek
11/22/2011	Oak Ridge Turnpike	1403	12000	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	Tributary to East Fork Poplar Creek
11/22/2011	Oak Ridge Turnpike	1403	11900	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	Tributary to East Fork Poplar Creek
11/22/2011	Purdue Avenue, North	117	65000	Excessive rainfall 2.06" rain in 24 hour period	City continues work to correct I&I	✔	East Fork Poplar Creek
11/22/2011	Robertsville Road		4500	Excessive rainfall 2.06" rain in 24 hour period and blocked by rags		✔	East Fork Poplar Creek
11/28/2011	Athens Road		286800	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	✔	Tributary to Melton Hill Lake
11/28/2011	Athens Road	119	362400	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	✔	Tributary to Melton Hill Lake
11/28/2011	Bay Path Drive	108	450000	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	✔	Emory Valley Creek
11/28/2011	Belgrade Road		144100	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	✔	Ernie's Creek
11/28/2011	Briarcliff Avenue	99	2040	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	✔	Emory Valley Creek
11/28/2011	Cairo Lane	151	370400	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	✔	Ernie's Creek

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
11/28/2011	California Avenue	106	143700	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to Melton Hill Lake
11/28/2011	Dresden Road	100	288000	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to Ernie's Creek
11/28/2011	Illinois Avenue, South	216	323250	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	East Fork Poplar Creek
11/28/2011	Illinois Avenue, South	324	258800	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	East Fork Poplar Creek
11/28/2011	Iroquois Road		322500	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Iroquois Road	143	100	Excessive rainfall of 4.8" in a 36 hour period. MH D9-43 surcharged and backed sewer into the basement through the shower drain. The city wasn't notified of a problem until 12/7/11 and was unable to make contact with homeowner until 12/12/11. Flow data on this report was based on another reported overflow of MH D9-42 on same date at same location.	City continues work to correct I&I. Sewer check valve will be installed on the homeowner's sewer lateral.	☐	
11/28/2011	Iroquois Road	143	4640	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Jefferson Avenue	215	191700	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Melton Lake Drive	695	375000	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Melton Hill Lake
11/28/2011	Monterey Road		376200	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	East Fork Poplar Creek
11/28/2011	Newkirk Lane, West	116	287200	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to Ernie's Creek
11/28/2011	Oak Ridge Turnpike	1289	286400	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Oak Ridge Turnpike	1403	136300	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to 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
11/28/2011	Oak Ridge Turnpike	1403	430500	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Oak Ridge Turnpike	1403	68300	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Oak Ridge Turnpike	470	388500	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Ernie's Creek
11/28/2011	Oak Ridge Turnpike	535	392250	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Ernie's Creek
11/28/2011	Providence Road	110	134400	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Providence Road	110	134400	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Providence Road	270	131600	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Purdue Avenue, North	117	573000	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	East Fork Poplar Creek
11/28/2011	Taylor Road	103	144300	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to Ernie's Creek
11/28/2011	Tusculum Drive	191	193650	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	East Fork Poplar Creek
11/28/2011	Tusculum Drive	196	9600	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	East Fork Poplar Creek
11/28/2011	Tuskegee Drive	500	2920	Excessive rainfall of 4.8" in a 36hr period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
11/28/2011	Umbria Lane	103	150	Excessive rainfall of 4.8" in a 36hr period	Water was confined to the basement. Called the city's insurance adjuster for inspection and to have it commercially cleaned. City continues work to correct I&I	☐	
12/2/2011	Athens Road	130	2000	Evidence of overflow found at 8:30 am due to excessive rainfall of 4.8" in a 36hr period. 11/27-11/28/2011	City continues work to correct I&I	☑	Tributary to Melton Hill Lake
12/7/2011	Athens Road	119	7140	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Tributary to Melton Hill Lake

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
12/7/2011	Cairo Lane	151	26900	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Ernie's Creek
12/7/2011	Dresden Road	100	312	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Tributary to Ernie's Creek
12/7/2011	Illinois Avenue, South	216	5100	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	East Fork Poplar Creek
12/7/2011	Melton Lake Drive	695	55800	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Melton Hill Lake
12/7/2011	Oak Ridge Turnpike	1403	30700	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
12/7/2011	Oak Ridge Turnpike	1403	8400	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
12/7/2011	Oak Ridge Turnpike	1403	3400	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Tributary to East Fork Poplar Creek
12/7/2011	Oak Ridge Turnpike	470	3850	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Ernie's Creek
12/7/2011	Oak Ridge Turnpike	535	12500	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	Ernie's Creek
12/7/2011	Purdue Avenue, North	117	83400	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	East Fork Poplar Creek
12/7/2011	Tusculum Drive	191	1560	Excessive rainfall 2.1" rain in 40hour period	City continues work to correct I&I	☑	East Fork Poplar Creek
12/19/2011	Salem Road	107	50			☐	
12/21/2011	Connors Place	102	5	City contractor vacuum testing manholes M-18-8 plugged off the lateral to 102 Connors Place. Homeowner started taking a shower upstairs and water came out into the downstairs bathroom toliet	Contractor has been instructed to contact the homeowners before plugging off any laterals.	☐	

Start Date	St Name	St #	Est Tot Flow (Gal)	Explain OF Cause	Other Measures	Flow in Surface	Name of Surface Water
12/23/2011	Newark Lane	103	10	House had been demolised 8/26/10. Plug was installed in the lateral that comes into the sewer manhole. House was rebuilt 1.5 years later. Sewer plug was still in the sewer lateral creating a blockage. Water that was used up stairs went into the basement.	Sewer plug was removed and sewer was cleaned up. City's insurance adjuster was contacted.	☐	

CITY OF OAK RIDGE

REPORT DATE: 10/4/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1090 W. Outer Dr. 1st Occurrence at this location? Y ☒ N ☐ K Stout

If No, Date of Last Occurrence:

POINT OF OCCURANCE

Manhole ☐ Clean Out ☐ In-House Backup ☒ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W-17 Map Page # A-3W Manhole # Force Main: ☐

FLOW DATA

Start Date: 10/3/2011 Time: 2:00 AM ☐ PM ☒ End Date: 10/3/2011 Time: 2:05 AM ☐ PM ☒

Duration 5 mins hours/minutes Est. Flow Rate: ? gpm Estimated Total Flow: 1 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☒

Explain causes of overflow: Contractor cleaning the city's sewer main blew water out of the toilet.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☐ Other: Contractor offered to clean up the spill but the homeowner refused any assistance.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☒ Name of surface water:

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

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

Other (describe) Water was confined to the bathroom.

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

Names of Responders: Intuitive Technologies cleaning contractor.

Report completed by Rick Irwin Title: Operations & Maint. Manager Date: 10/4/11

Reviewed by Kathy Stout Title: Admin. Assistant Date: 10/4/11

Initial TDEC Notification By: Rick Irwin Date: 10/4/2011 K Stout

After Review & Notification to TDEC Title: Operations Manager Date: 10.4.11

Final Review Title: Public Works Director Date: 10/4/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 10/5/11

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CITY OF OAK RIDGE

REPORT DATE: 10/4/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1092 W. Outer Dr 1st Occurrence at this location? Y ☒ N ☐ KStout

If No, Date of Last Occurrence:

POINT OF OCCURANCE

Manhole ☐ Clean Out ☐ In-House Backup ☒ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W-17 Map Page # A-3W Manhole # Force Main: ☐

FLOW DATA

Start Date: 10/03/2011 Time: 2:00 AM ☐ PM ☒ End Date: 10/3/2011 Time: 2:05 AM ☐ PM ☒

Duration 5 hours/minutes Est. Flow Rate: ? gpm Estimated Total Flow: 1 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☒

Explain causes of overflow: Contractor cleaning the city's sewer main blew water out of the toilet.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☐ Other: Home owner cleaned up the spill before the contractor arrived to help assist.Homeowner didn't report the incident until 9:00 am 10/04/2011.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☒ Name of surface water:

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

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

Other (describe) Water was confined to the bathroom.

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

Names of Responders: Intuitive Technologies cleaning contractor.

Report completed by Rick Irwin Title: Operations & Maint. Manager Date: 10/4/11

Reviewed by Kathy Stout Title: Admin. Assistant Date: 10/4/11

Initial TDEC Notification By: Rick Irwin Date: 10/04/2011 KStout

After Review & Notification to TDEC Title: Operations Manager Date: 10-4-11

Final Review Title: Public Works Director Date: 10/4/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 10/5/11

FAXED

CITY OF OAK RIDGE
SANITARY SEWER OVERFLOW FINAL REPORT

REPORT DATE: 10/10/2011 NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 109 Beverly Cir. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 5/24/11

POINT OF OCCURANCE

Manhole ☐ Clean Out ☐ In-House Backup ☒ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18G Map Page # D-4 Manhole # _____ Force Main: ☐

FLOW DATA

Start Date: 10/7/2011 Time: 9:15 AM ☒ PM ☐ End Date: 10/7/2011 Time: 9:20 AM ☒ PM ☐

Duration 5 hours/minutes Est. Flow Rate: ? gpm Estimated Total Flow: 1 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount _____ in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☒

Explain causes of overflow: Contractor cleaning the city's sewer main blew water out of the toilet.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☐ Other: Home owner cleaned up the spill.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☒ Name of surface water: _____

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

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

Other (describe) Water was confined to the bathroom.

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

Names of Responders: Intuitive Technologies cleaning contractor.

Report completed by Rick Irwin Title: Operations & Maint. Manager Date: 10/10/11

Reviewed by Kathy Stout Title: Administrative Assistant Date: 10/10/11

Initial TDEC Notification By: Rick Irwin Date: 10/7/2011

After Review & Notification to TDEC _____ Title: Operations Manager Date: 10-10-11

Final Review _____ Title: Public Works Director Date: 10/10/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 10/10/11

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CITY OF OAK RIDGE

REPORT DATE: 10/20/2011 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: 9/5/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E20 Map Page # L24 Manhole # L24-1 Force Main: ☐

FLOW DATA

Start Date: 10/19/2011 Time: 8:24 AM ☒ PM ☐ End Date: 10/19/2011 Time: 11:35 AM ☒ PM ☐

Duration 3hrs./11min hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 19,100 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Estimated 2" of rainfall

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 10/20/11 KS

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 10/21/11

Initial TDEC Notification By: David Patterson Date: 10/19/2011

After Review & Notification to TDEC [signature] Title: Operations Manager Date: 10-24-11

Final Review [signature] Title: Public Works Director Date: 10/25/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 10/25/11

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CITY OF OAK RIDGE

REPORT DATE: 10/20/2011 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: 9/5/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5A Map Page # G15 Manhole # G15-13 Force Main: ☐

FLOW DATA

Start Date: 10/19/2011 Time: ? AM ☒ PM ☐ End Date: 10/19/2011 Time: 9:58 AM ☒ PM ☐

Duration ? hours/minutes Est. Flow Rate: ? gpm Estimated Total Flow: 1000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Evidence of overflow found at 9:58 A.M. estimated 2" of rainfall.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 10/20/11 KS

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 10/21/11

Initial TDEC Notification By: David Patterson Date: 10/19/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 10-24-11

Final Review [signature] Title: Public Works Director Date: 10/25/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 10/25/11

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CITY OF OAK RIDGE

REPORT DATE: 10/25/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Scarboro Rd. 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence:

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W26 Map Page # R14 Manhole # Force Main: ☒

FLOW DATA

Start Date: 10/25/2011 Time: 1:09 AM ☐ PM ☒ End Date: 10/25/2011 Time: 1:29 AM ☐ PM ☒

Duration 20 min. hours/minutes Est. Flow Rate: 250 gpm Estimated Total Flow: 5,000 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☒ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Break on cast iron sewer force main. (Exact location of occurrence, Scarboro Rd.1008' South of Chesapeake Dr.) Previous occurrence 3/15/2011 was located 560' South of Chesapeke Dr.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ Equipment Repair ☐

Line will be: cleaned and TV'd for needed repair: ☐ Other: Force main was repaired.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☒ Name of surface water: Tributary leading to Clinch River

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, Trevor Gallaher, Tony Morris

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 10/25/11

Reviewed by Rick Swann Title: Operations + Maint. Manager Date: 10/27/11

Initial TDEC Notification By: David Patterson Date: 10/25/2011

After Review & Notification to TDEC [signature] Title: Operations Manager Date: 10-28-11

Final Review [signature] Title: Public Works Director Date: 10/31/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 10/31/11

FAXED ✓

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Athens Rd.@ E. Arrowwood Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 9/6/2011 5

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E11 Map Page # E23 Manhole # New-E23-49 Old-D1010 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 1:39 AM ☐ PM ☒ End Date: 11/16/2011 Time: 5:04 AM ☐ PM ☒

Duration 3hrs.25min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 41,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 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, Emie Bailey

Report completed by: David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Nick Lawrie Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review JR Byrd CITY ENGR Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 119 Athens Rd. 1st Occurrence at this location? Y N 5

If No, Date of Last Occurrence: 9/6/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E11 Map Page # E22 Manhole # New-E22-32 Old-D1018 Force Main:

FLOW DATA

Start Date: 11/16/2011 Time: 1:41 AM PM End Date: 11/16/2011 Time: 5:05 AM PM

Duration 3hrs.24min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 40,800 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 3.02 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review JR Byrd CITYENGR FOR Title: Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 108 Bay Path Dr. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 9/6/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E5B Map Page # L22 Manhole # L22-4 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 3:45 AM ☐ PM ☒ End Date: 11/16/2011 Time: 4:50 AM ☐ PM ☒

Duration 1hr.5min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 6,500 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emory Valley 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review RR Byrd, CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Belgrade Rd. 5 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 9/6/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E13A Map Page # F21 Manhole # New-F21-1 Old-F901 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 1:15 AM ☐ PM ☐ End Date: 11/16/2011 Time: 5:00 AM ☐ PM ☐

Duration 3hrs.45min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 11,250 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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: Emies 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review RRByrd, CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 151 Cairo Ln. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 9/6/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E5B Map Page # G22 Manhole # G22-14 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 3:35 AM ☐ PM ☒ End Date: 11/16/2011 Time: 5:58 AM ☐ PM ☒

Duration 2hrs.23min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 14,300 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lawson Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review SRByrd CITYENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 100 Dresden Rd. 5 **1st Occurrence at this location? Y ☐ N ☒**

If No, Date of Last Occurrence: 9/6/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E13A Map Page # F20 Manhole # F-701A Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 1:23 AM ☐ PM ☐ End Date: 11/16/2011 Time: 5:12 AM ☐ PM ☐

Duration 3hrs.49min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 22,900 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 3.02" in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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 Emies 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byrd CITY ENGR. FOR Title: Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 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: 9/6/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18A Map Page # J11 Manhole # J11-16 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 2:50 AM ☐ PM ☒ End Date: 11/16/2011 Time: 5:31 AM ☐ PM ☒

Duration 2hrs.41min. hours/minutes Est. Flow Rate: 500 gpm Estimated Total Flow: 80,500 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations + Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review SRByrd CITY ENGR. Title: Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 324 S. Illinois Ave. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 9/6/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☒ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18A Map Page # J12 Manhole # J12-11 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 2:47 AM ☐ PM ☒ End Date: 11/16/2011 Time: 3:20 AM ☐ PM ☒

Duration 33min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 3,300 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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) Commercial-Papa Johns Pizza

Other (describe) Sewer came up in bathroom around toilet

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

Names of Responders: David Patterson, Ernie Bailey, Rick Irwin

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Irwin Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byd CITY ENGR Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Iroquois Rd. @ Robertsville Rd. 1st Occurrence at this location? Y N

If No, Date of Last Occurrence 9/6/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W11 Map Page # E10 Manhole # New-AP-5 Old- 2-82 Force Main:

FLOW DATA

Start Date: 11/16/2011 Time: 3:03 AM PM X End Date: 11/16/2011 Time: 5:40 AM PM X

Duration 2hrs. 37min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 15,700 gallons

CAUSES

(Check all that apply)

Rainfall X [Estimated amount 3.02 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review JRByrd CITY ENGR. FOR Title: Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 215 Jefferson Ave. 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence:

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift 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: 11/16/2011 Time: 2:30 AM ☐ PM ☒ End Date: 11/16/2011 Time: 3:10 AM ☐ PM ☒

Duration 40min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 2000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review JRByrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 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: 10/19/2011 ✓

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E20 Map Page # L24 Manhole # L24-1 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 3:41 AM ☐ PM ☒ End Date: 11/16/2011 Time: 8:10 AM ☐ PM ☒

Duration 4hrs.29min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 26,900 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/16/2011 (17) **SANITARY SEWER OVERFLOW FINAL REPORT** **NPDES PERMIT #** TN0024155

LOCATION DATA

LOCATION: Monterey Rd. **1st Occurrence at this location?** Y ☐ N ☐

If No, Date of Last Occurrence 11/30/2010

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18G Map Page # D2 Manhole # D2-2 Force Main: ☐

FLOW DATA D2-3 Awesomely K Stout 11/21/11

Start Date: 11/16/2011 Time: 2:00 AM ☐ PM ☒ End Date: 11/16/2011 Time: 7:30 AM ☐ PM ☒

Duration 5hrs. 30 min. hours/minutes Est. Flow Rate: 500 gpm Estimated Total Flow: 165,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☒

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding. Combind with problems with one of the pumps @ Turtle Park.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ Equipment Repair ☒

Line will be: cleaned and TV'd for needed repair: ☐ Other: City continues work to correct I&I, Pump @ Turtle Park will be repaired.

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, Tony Morris, Emie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Erwin Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/17/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review SR Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 116 W. Newkirk Ln. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 2/28/2011 ✓

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W6 Map Page # E14 Manhole # New-DA34 Old-D109 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 2:10 AM ☐ PM ☒ End Date: 11/16/2011 Time: 5:20 AM ☐ PM ☒

Duration 3hrs.10min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 19,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations + Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Machor Title: Operations Manager Date: 11-21-11

Final Review JR Byd CITYENGR Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 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 9/6/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5 Map Page # G13 Manhole # New-G13-12 Old-D22 Force Main:

FLOW DATA

Start Date: 11/16/2011 Time: 2:20 AM PM End Date: 11/16/2011 Time: 4:36 AM PM

Duration 2hrs.16min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 13,600 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 3.02 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed [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 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,Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Swain Title: Operations/Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1403 Oak Ridge Tumpike 1st Occurrence at this location? Y N

If No, Date of Last Occurrence 9/6/2011 5

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New-G12-2 Old-D5 Force Main:

FLOW DATA

Start Date: 11/16/2011 Time: 2:30 AM PM End Date: 11/16/2011 Time: 4:30 AM PM

Duration 2hrs. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 6,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 3.02 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lawson Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byrd CITY ENGR Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 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 9/6/2011 5

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New-G12-1 Old-D4 Force Main:

FLOW DATA

Start Date: 11/16/2011 Time: 2:27 AM PM End Date: 11/16/2011 Time: 4:30 AM PM

Duration 2hrs.3min hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 6,150 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 3.02 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lowrie Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review JR Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 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 9/6/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G11 Manhole # New-G11-8 Old-D3 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 2:25 AM ☐ PM ☒ End Date: 11/16/2011 Time: 6:30 AM ☐ PM ☒

Duration 4hrs.5min. hours/minutes Est. Flow Rate: 500 gpm Estimated Total Flow: 122,500 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by Wasfi Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations/Maint. Manager Date: 11/21/11

Initial TDEC **Notification** By: David Patterson Date: 11/16/2011

After Review & Notification to **TDEC** Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review RRByrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 470 Oak Ridge Tumpike 1st Occurrence at this location? Y N

If No, Date of Last Occurrence 9/6/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E10 Map Page # F20 Manhole # F20-25 Force Main:

FLOW DATA

Start Date: 11/16/2011 Time: 1:52 AM PM End Date: 11/16/2011 Time: 5:10 AM PM

Duration 3hrs.18min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 39,600 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 3.02 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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 Emies 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

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

If No, Date of Last Occurrence: 9/6/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E13A Map Page # G20 Manhole # F-702 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 1:33 AM ☐ PM ☒ End Date: 11/16/2011 Time: 5:15 AM ☐ PM ☒

Duration 3hrs.42min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 44,400 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emies 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Ulmer Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review JR Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 110 Providence Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 2/28/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W6 Map Page # F13 Manhole # New-DA23 Old-DD101 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 2:38 AM ☐ PM ☒ End Date: 11/16/2011 Time: 4:10 AM ☐ PM ☒

Duration 1hr.32min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 4,600 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Ernie Bailey

Report completed by Wahid Patterson Title: Senior Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 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 ~~9/5/2011~~ 10/19/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5A Map Page # G15 Manhole # G15-13 Force Main:

FLOW DATA

Start Date: 11/16/2011 Time: 2:15 AM PM End Date: 11/16/2011 Time: 8:20 AM PM

Duration 6hrs.5min. hours/minutes Est. Flow Rate: 500 gpm Estimated Total Flow: 182,500 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 3.02 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review JRByrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

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

If No, Date of Last Occurrence: 9/6/2011 5

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W10 Map Page # E10 Manhole # 2-80 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: ? AM ☐ PM ☐ End Date: 11/16/2011 Time: 3:01 AM ☐ PM ☒

Duration ? hours/minutes Est. Flow Rate: ? gpm Estimated Total Flow: 1,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.Found signs of overflow at 3:01 PM

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review J R Byrd CITY ENGR. Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/17/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 191 Tusculum Dr. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 9/6/2011 5

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W19 Map Page # H11 Manhole # H11-4 Force Main: ☐

FLOW DATA

Start Date: 11/16/2011 Time: 2:55 AM ☐ PM ☒ End Date: 11/16/2011 Time: 5:35 AM ☐ PM ☒

Duration 2hrs.40min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 16,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 3.02 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 3.02" over a 2 day period 1.5" of the total fell in a 2 hour period 12 pm - 2 pm 11/16/2011 causing severe flooding.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-17-11

Reviewed by Rick Lauria Title: Operations + Maint. Manager Date: 11/21/11

Initial TDEC Notification By: David Patterson Date: 11/16/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-21-11

Final Review LRByrd CITY ENGR Title: FOR Public Works Director Date: 11-22-11

Final Report Transmitted to TDEC By: Katy Stout Date: 11-22-11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 119 Athens Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E11 Map Page # E22 Manhole # new-E22-32 Old-D1018 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 7:29 AM ☐ PM ☒ End Date: 11/22/2011 Time: 9:55 AM ☐ PM ☒

Duration 2hrs.26min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 14,600 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06"rain in 24hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 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, Thurston Nix

Report completed by Wayland Patterson Title: Sewer Maint. Recidist Date: 11-23-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/23/2011 ✓ ks

After Review & Notification to TDEC _____ Title: Operations Manager Date: 11.30.11

Final Review _____ Title: Public Works Director Date: 11/ /

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 108 Bay Path Dr. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/16/2011 ✓

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E5B Map Page # L22 Manhole # L22-4 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 6:49 AM ☐ PM ☒ End Date: ~~6~~ 11/22/2011 Time: 10:00 AM ☐ PM ☒

Duration 3hrs.11min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 19,100 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06"rain in 24hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emory Valley 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, Thurston Nix

Report completed by David Patterson Title: Sewer Maint. Spec. II Date: 11/23/11

Reviewed by Rick Lewis Title: Operations + Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/22/2011 ✓

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 151 Cairo Ln. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E13B Map Page # G22 Manhole # G22-14 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 7:00 AM ☐ PM ☒ End Date: 11/22/2011 Time: 9:50 AM ☐ PM ☒

Duration 2hrs. 50 min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 17,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06" rain in 24hr period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emies 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, Thurston Nix

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11/23/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/23/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

REPORT DATE: 11/23/2011

CITY OF OAK RIDGE
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 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18A Map Page # J11 Manhole # J11-16 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 8:55 AM ☐ PM ☒ End Date: 11/22/2011 Time: 9:45 AM ☐ PM ☒

Duration 50min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 5,000 gallons

CAUSES
(Check all that apply)

Rainfall ☒ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06"rain in 24hr. Period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Thurston Nix

Report completed by David Patterson Title: Senior Maint. Specialist Date: 11/23/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/22/2011 1:45

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** **NPDES PERMIT # TN0024155**

LOCATION DATA

LOCATION: 215 Jefferson Ave **1st Occurrence at this location? Y ☐ N ☒**

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: **None** or **None** or **None**

If Manhole; Give Mini-system # **W12** Map Page # **D-9** Manhole # **D9-6** Force Main: ☐

FLOW DATA

Start Date: **11/22/2011** Time: **5:10** AM ☐ PM ☒ End Date: **11/22/2011** Time: **6:25** AM ☐ PM ☒

Duration **1hr 15mins** hours/minutes Est. Flow Rate: **1** gpm Estimated Total Flow: **75** gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount **2.06** in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☒

Explain causes of overflow: **Line blocked by rags and excessive rainfall 2.06" rain in 24hr period**

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☒ Lid Removed ☐ Limed ☒ Equipment Repair ☐

Line will be: cleaned and TV'd for needed repair: ☒ Other: ☐

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: **Trevor Gallaher, Don Smith**

Report completed by [signature] Title: Sewer Rehab Crew Chief Date: 11-23-2011

Reviewed by [signature] Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC **Notification** By: **Trevor Gallaher** Date: **11/23/2011** 4?

After Review & Notification to **TDEC** [signature] Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: [signature] Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 895 Melton Lake Dr. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E20 Map Page # L24 Manhole # L24-1 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 6:44 AM ☐ PM ☒ End Date: 11/23/2011 Time: 1:30 AM ☒ PM ☐

Duration 6hrs.46min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 40,600 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06 " rain in 24hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Thurston Nix

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-23-11

Reviewed by Rick Lauzi Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/22/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review D. Lynn Cunningham Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Monterey Rd. 1st Occurrence at this location? Y N

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W18G Map Page # D2 Manhole # D2-2 Force Main:

FLOW DATA

Start Date: 11/22/2011 Time: 6:00 AM PM End Date: 11/22/2011 Time: 9:00 AM PM

Duration 3hrs hours/minutes Est. Flow Rate: 500 gpm Estimated Total Flow: 90,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 2.06 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 2.06" rain in 24hr. period, combined with problems with one of the pumps at Turtle Park.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: Other: City continues work to correct I&I Pump at Turtle Park will be repaired.

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 Earnest Bailey

Report completed by Wadell Patterson Title: Sewer Maint. Specialist Date: 11-23-11

Reviewed by Nick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/23/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 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: 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G11 Manhole # New-G11-8 Old-D3 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 8:30 AM ☐ PM ☒ End Date: 11/22/2011 Time: 10:30 AM ☐ PM ☒

Duration 2hrs. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 12,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06" rain in 24hr.period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Thurston Nix

Report completed by Wayfield Patterson Title: Sewer Maint. Specialist Date: 11-23-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/22/2011 1/K

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review Greg Cowden Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1403 Oak Ridge Tumpike 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/16/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New-G12-1 Old-D4 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 8:32 AM ☐ PM ☐ End Date: 11/22/2011 Time: 10:32 AM ☐ PM ☐

Duration 2hrs. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 12,000 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06" rain in 24 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Thurston Nix

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-23-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/22/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1403 Oak Ridge Tumpike 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/16/2011

POINT OF OCCURANCE

Manhole ◇ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New-G12-2 Old-D5 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 8:34 AM ☐ PM ◇ End Date: 11/22/2011 Time: 10:33 AM ☐ PM ◇

Duration 1hr.59min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 11,900 gallons

CAUSES

(Check all that apply)

Rainfall ◇ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.06"rain in 24 hr.period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ◇ 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, Thurston Nix

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-23-11

Reviewed by Rick Edwards Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/22/2011 / 29

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 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 11/16/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5A Map Page # G15 Manhole # G15-13 Force Main:

FLOW DATA

Start Date: 11/22/2011 Time: 8:15 AM PM End Date: 11/23/2011 Time: 1:40 AM PM

Duration 5hrs.25min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 65,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 2.06 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 2.06" rain in 24 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Thurston Nix

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11-23-11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: David Patterson Date: 11/22/2011 ✓

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review [signature] Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/23/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Robertsville Rd @ Jefferson Ave 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W12 Map Page # E-9 Manhole # N-53-1 Force Main: ☐

FLOW DATA

Start Date: 11/22/2011 Time: 5:10 AM ☐ PM ☒ End Date: 11/22/2011 Time: 6:25 AM ☐ PM ☒

Duration 1hr 15 mins hours/minutes Est. Flow Rate: 60 gpm Estimated Total Flow: 4500 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.06 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☒

Explain causes of overflow: Line blocked by rags and excessive rainfall 2.06" rain in 24hr period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☒ Lid Removed ☐ Limed ☒ Equipment Repair ☐

Line will be: cleaned and TV'd for needed repair: ☒ Other:

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: Trevor Gallaher, Don Smith

Report completed by Trevor Gallaher Title: Sewer rehab crew chief Date: 11/23/2011

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 11/29/11

Initial TDEC Notification By: Trevor Gallaher Date: 11/23/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 11-30-11

Final Review Doug Conder Title: Public Works Director Date: 11/30/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 11/30/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Athens Rd.@ E. Arrowwood Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E11 Map Page # E23 Manhole # New-E23-49 Old-D1010 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 8:56 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:50 AM ☒ PM ☐

Duration 23hrs.54min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 286,800 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Clevenger Title: Operations + Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011

After Review & Notification to TDEC Keith Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

REPORT DATE: 12/1/2011

CITY OF OAK RIDGE
SANITARY SEWER OVERFLOW FINAL REPORT

NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 119 Athens Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/22/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E11 Map Page # E22 Manhole # New-E22-32 Old D1018 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 8:58 AM ☒ PM ☐ End Date: 11/29/2011 Time: 3:10 AM ☐ PM ☒

Duration 30hrs. 12min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 362,400 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" rain in a 36hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/1/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12.2.11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 108 Bay Path Dr. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence ~~11/16/2011~~ 1/22/11 JS

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E5B Map Page # L22 Manhole # L22-4 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 8:20 AM ☒ PM ☐ End Date: 11/29/2011 Time: 9:20 AM ☒ PM ☐

Duration 25hrs. hours/minutes Est. Flow Rate: 300 gpm Estimated Total Flow: 450,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emory Valley 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lawson Title: Operations/Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** **NPDES PERMIT # TN0024155**

LOCATION DATA

LOCATION: Belgrade Rd. **1st Occurrence at this location? Y ☐ N ☒**

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: **None** or **None** or **None**

If Manhole; Give Mini-system # **E13A** Map Page # **F21** Manhole # **F21-1** Force Main: ☐

FLOW DATA

Start Date: **11/28/2011** Time: **8:34** AM ☒ PM ☐ End Date: **11/29/2011** Time: **8:35** AM ☒ PM ☐

Duration **24hrs.1min.** hours/minutes Est. Flow Rate: **100** gpm Estimated Total Flow: **144,100** gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount **4.8** in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: **Emies 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, Earnest Bailey**

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Stewart Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: **David Patterson** Date: **11/28/2011** ✓ KS

After Review & Notification to **TDEC** Scott Jackson Title: Operations Manager Date: 12.2.11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 99 Briarcliff Ave. 1st Occurrence at this location? Y [X] N [ ] KS

If No, Date of Last Occurrence:

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E5B Map Page # L21 Manhole # L21-5A Force Main: [ ]

FLOW DATA

Start Date: 11/28/2011 Time: 11:43 AM [ ] PM [ ] End Date: 11/28/2011 Time: 3:07 AM [ ] PM [ ]

Duration 3hrs.24min. hours/minutes Est. Flow Rate: 10 gpm Estimated Total Flow: 2,040 gallons

CAUSES

(Check all that apply)

Rainfall [ ] [Estimated amount 4.8 in] Power Outage [ ] Equipment Failure [ ]

Broken Sewer [ ] Blocked line from Roots [ ] Grease [ ] Collapse [ ] Other [ ]

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded [ ] Nozzle [ ] Root Saw [ ] Lid Removed [ ] Limed [ ] 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: Emory Valley 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, Anthony Morris, Emie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11/29/11

Reviewed by Kirk Lauri Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 12/1/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** **NPDES PERMIT #** TN0024155

LOCATION DATA

LOCATION: 151 Cairo Ln. **1st Occurrence at this location?** Y ☐ N ☒

If No, Date of Last Occurrence 11/22/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E13B Map Page # G22 Manhole # G22-14 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 8:28 AM ☒ PM ☐ End Date: 11/29/2011 Time: 3:20 AM ☐ PM ☒

Duration 30 hrs.52min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 370,400 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" rain in a 36hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emies 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 12/1/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011

After Review & Notification to TDEC Scott Jenkins Title: Operations Manager Date: 12-2-11 KS

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 106 California Ave. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence VCL KS

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E10 Map Page # F20 Manhole # D815 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 9:08 AM ☒ PM ☐ End Date: 11/29/2011 Time: 9:05 AM ☒ PM ☐

Duration 23hrs. 57min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 143,700 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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 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 Earnest Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 100 Dresden Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E13A Map Page # F20 Manhole # F-701A Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 8:40 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:40 AM ☒ PM ☐

Duration 24hrs. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 288,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 Emies 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Clewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 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: ~~11/16/2011~~ 11/28/11 KS

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18A Map Page # J11 Manhole # J11-16 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:29 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:02 AM ☒ PM ☐

Duration 21hrs.33min. hours/minutes Est. Flow Rate: 250 gpm Estimated Total Flow: 323,250 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11/29/11

Reviewed by Rick Irwin Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 324 S. Illinois Ave. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☒ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18A Map Page # J12 Manhole # J12-11 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:26 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:00 AM ☒ PM ☐

Duration 21hrs. 34min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 258,800 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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) Commercial, Papa Johns Pizza

Other (describe) Sewer come in around the base of the toilet.

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

Names of Responders: David Patterson, Ernie Bailey

Report completed by Wayland Patterson Title: Sewer Maint. Leadman Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Iroquois Rd. @ Robertsville Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W11 Map Page # E10 Manhole # New-AP-5 Old-2-82 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:45 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:15 AM ☒ PM ☐

Duration 21hrs.30min. hours/minutes Est. Flow Rate: 250 gpm Estimated Total Flow: 322,500 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 12/15/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 143 Iroquois Rd. 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence

POINT OF OCCURANCE

Manhole ☐ Clean Out ☐ In-House Backup ☒ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W11 Map Page # D9 Manhole # Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:48 AM ☒ PM ☐ End Date: 11/28/2011 Time: 2:40 AM ☐ PM ☒

Duration 3hrs 52 min hours/minutes Est. Flow Rate: ? gpm Estimated Total Flow: 100 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 4.8" in a 36 hr period. MH D9-43 surcharged and backed sewer into the basement through the shower drain. The city wasn't notified of a problem until 12/7/2011 and was unable to make contact with homeowner until12/12/2011.Flow data on this report was based on another reported overflow of MH D9-42 on same date at same location.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☐ Other: City continues work to correct I&I. Sewer check valve will be installed on the homeowners sewer lateral.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☒ Name of surface water:

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

Basement Back-up ☒ No. of basements 1 Use (i.e., commercial, residential) residential

Other (describe)

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

Names of Responders: Rick Irwin

Report completed by Rick Irwin Title: Operations & Maint. Manager Date: 12/15/11

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: Rick Irwin Date: 12/15/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12/15-11

Final Review _____ Title: Public Works Director Date: 12/19/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/19/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 143 Iroquois Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/30/2010 ✓

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W11 Map Page # D9 Manhole # New-D9-42 Old-2-32A Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:48 AM ☒ PM ☐ End Date: 11/28/2011 Time: 2:40 AM ☐ PM ☒

Duration 3hrs.52 min. ✓ hours/minutes Est. Flow Rate: 20 gpm Estimated Total Flow: 4,640 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11/29/2011

Reviewed by Rick Lauri Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 215 Jefferson Ave. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: ~~11/16/2011~~ 11/22/11 KS

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift 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: 11/28/2011 Time: 10:52 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:10 AM ☒ PM ☐

Duration 21hrs.18min. hours/minutes Est. Flow Rate: 150 gpm Estimated Total Flow: 191,700 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11/29/11

Reviewed by Rick Clausen Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 12/1/2011 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 11/22/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E20 Map Page # L24 Manhole # L24-1 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 8:15 AM ☒ PM ☐ End Date: 11/29/2011 Time: 5:30 AM ☐ PM ☒

Duration 31hrs. 15min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 375,000 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" rain in a 36hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 12/1/11

Reviewed by Rick Lawrence Title: Operations/Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12.2.11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: Monterey Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/16/2011

11/22/11 KS

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W18G Map Page # D2 Manhole # D2-2 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 11:06 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:00 AM ☒ PM ☐

Duration 20hrs. 54min. hours/minutes Est. Flow Rate: 300 gpm Estimated Total Flow: 376,200 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lawson Title: Operations/Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12.2.11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 116 W. Newkirk Ln. 1st Occurrence at this location? Y ☐ N ☐

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W6 Map Page # E14 Manhole # New-DA34 Old- D109 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 9:34 AM ☐ PM ☐ End Date: 11/29/2011 Time: 9:30 AM ☐ PM ☐

Duration 23hrs. 56min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 287,200 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lawrence Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT **NPDES PERMIT #** TN0024155

LOCATION DATA

LOCATION: 1289 Oak Ridge Tumpike **1st Occurrence at this location? Y** ☐ **N** ☒

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G13 Manhole # New-G13-12 Old-D22 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 9:55 AM ☒ PM ☐ End Date: 11/29/2011 Time: 9:47 AM ☒ PM ☐

Duration 23hrs. 52min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 286,400 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Earnest Bailey

Report completed by Walter Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC **Notification** By: David Patterson Date: 11/28/2011 KS

After Review & Notification to **TDEC** Scott Jackson Title: Operations Manager Date: 12.2.11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 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 ~~11/16/2011~~ 11/22/11

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New G12-2 Old D5 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:06 AM ☐ PM ☐ End Date: 11/29/2011 Time: 8:49 AM ☐ PM ☐

Duration 22hr 43min hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 136,300 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/11 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 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 ~~11/16/2011~~

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G11 Manhole # New-G11-8 Old-D3 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:00 AM ☒ PM ☐ End Date: 11/29/2011 Time: 9:55 AM ☒ PM ☐

Duration 23hrs. 55min. hours/minutes Est. Flow Rate: 300 gpm Estimated Total Flow: 430,500 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Clausi Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 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 ~~11/16/2011~~ 11/22/11

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New-G12-1 Old-D4 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:02 AM ☐ PM ☐ End Date: 11/29/2011 Time: 8:48 AM ☐ PM ☐

Duration 22hrs.46min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 68,300 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Earnest Bailey

Report completed by Wayne Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Clausi Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review Jay Cunningham Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 470 Oak Ridge Tumpike 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/16/2011 ✓

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E10 Map Page # F20 Manhole # F20-25 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 ✓ Time: 9:11 AM ☒ PM ☐ End Date: 11/29/2011 Time: 11:05 AM ☒ PM ☐

Duration 25hrs.54min. hours/minutes Est. Flow Rate: 250 gpm Estimated Total Flow: 388,500 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emies 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Clausi Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12.2.11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

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

If No, Date of Last Occurrence: 11/16/2011 ✓

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E13A Map Page # G20 Manhole # F-702 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 8:51 AM ☐ PM ☐ End Date: 11/29/2011 Time: 11:00 AM ☐ PM ☐

Duration 26hrs. 9min. ✓ hours/minutes Est. Flow Rate: 250 gpm Estimated Total Flow: 392,250 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ KS 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: Emies 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Dept. Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 110 Providence Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/30/10 KS

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W6 Map Page # F13 Manhole # DA22 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:18 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:42 AM ☒ PM ☐

Duration 22hrs. 24min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 134,400 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8" in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ KS Equipment Repair ☐

Line will be: cleaned and TV'd for needed repair: ☐ Other: City continues work to corect 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Sloan Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 110 Providence Rd 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/16/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W6 Map Page # F13 Manhole # New DA23 Old DD101 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:16 AM ☐ PM ☐ End Date: 11/29/2011 Time: 8:40 AM ☐ PM ☐

Duration 22hr 24 min hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 134,400 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☒ KS Limed ☐ 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, Ernie balley

Report completed by David Patterson Title: Sewer Maint Mechanic Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/11 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 270 Robertsville Rd 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W10 Map Page # E10 Manhole # 2-80 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 10:44 AM ☒ PM ☐ End Date: 11/29/2011 Time: 8:36 AM ☒ PM ☐

Duration 21hrs56min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 131,600 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 ,Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 12/1/2011 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 11/22/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5A Map Page # G15 Manhole # G15-13 Force Main:

FLOW DATA

Start Date: 11/28/2011 Time: 9:45 AM PM End Date: 11/29/2011 Time: 5:35 AM PM

Duration 31hrs.50min. hours/minutes Est. Flow Rate: 300 gpm Estimated Total Flow: 573,000 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 4.8 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 4.8" rain in a 36hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/1/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 103 Taylor Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 3/19/02 KS

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E9 Map Page # E19 Manhole # D719 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 9:17 AM ☐ PM ☐ End Date: 11/29/2011 Time: 9:20 AM ☐ PM ☐

Duration 24hrs.3min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 144,300 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ KS 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 Emies 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, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 191 Tusculum Dr. 1st Occurrence at this location? Y N

If No, Date of Last Occurrence 11/16/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W19 Map Page # H11 Manhole # H11-4 Force Main:

FLOW DATA

Start Date: 11/28/2011 Time: 10:33 AM PM End Date: 11/29/2011 Time: 8:04 AM PM

Duration 21hr.31min. hours/minutes Est. Flow Rate: 150 gpm Estimated Total Flow: 193,650 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 4.8 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Ernie Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 196 Tusculum Dr. 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W19 Map Page # H11 Manhole # H11-7 Force Main: ☐

FLOW DATA

Start Date: 11/28/2011 Time: 11:30 AM ☒ PM ☐ End Date: 11/28/2011 Time: 3:30 AM ☐ PM ☒

Duration 4hrs. hours/minutes Est. Flow Rate: 40 gpm Estimated Total Flow: 9,600 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 4.8 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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 Ernie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11/29/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/29/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 500 Tuskegee Dr. 1st Occurrence at this location? Y [X] N [ ]

If No, Date of Last Occurrence

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W4 Map Page # K10 Manhole # K10-9 Force Main: [ ]

FLOW DATA

Start Date: 11/28/2011 Time: 1:09 AM [ ] PM [ ] End Date: 11/28/2011 Time: 3:35 AM [ ] PM [ ]

Duration 2hrs.26min. hours/minutes Est. Flow Rate: 20 gpm Estimated Total Flow: 2,920 gallons

CAUSES

(Check all that apply)

Rainfall [ ] [Estimated amount 4.8 in] Power Outage [ ] Equipment Failure [ ]

Broken Sewer [ ] Blocked line from Roots [ ] Grease [ ] Collapse [ ] Other [ ]

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded [ ] Nozzle [ ] Root Saw [ ] Lid Removed [ ] Limed [ ] 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, Emie Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 11-29-11

Reviewed by Rick Lawson Title: Operations & Maint. Manager Date: 12/1/11

Initial TDEC Notification By: David Patterson Date: 11/28/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 11/30/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** **NPDES PERMIT # TN0024155**

LOCATION DATA

LOCATION: 103 Umbria Ln. **1st Occurrence at this location? Y ☐ N ☒** KS

If No, Date of Last Occurrence: 11/30/2005 KS

POINT OF OCCURANCE

Manhole ☐ Clean Out ☐ In-House Backup ☒ Lift Station Name: **None** or **None** or **None**

If Manhole; Give Mini-system # W6 Map Page # Manhole # Force Main: ☐

FLOW DATA

Start Date: **11/28/2011** Time: **7:00** AM ☐ PM ☒ End Date: **11/29/2011** Time: **12:00** AM ☒ PM ☐

Duration **5** hours/minutes Est. Flow Rate: **.5** gpm Estimated Total Flow: **150** gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount **4.8** in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall of 4.8" in a 36hr period.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☐ Other: Water was confined to the basement, Called the city's insurance adjuster for inspection and to have it commercially cleaned. 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:

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

Basement Back-up ☒ No. of basements **1** Use (i.e., commercial, residential) **residential**

Other (describe)

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

Names of Responders: Todd Baker, Rick Irwin

Report completed by Rick Irwin Title: Operations & Maint. Manager Date: 12/1/11

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: Rick Irwin Date: 11/29/2011

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-2-11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 12/2/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 130 Athens Road 1st Occurrence at this location? Y [X] N

If No, Date of Last Occurrence

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E12 Map Page # E-23 Manhole # New E23-4 ,Old C-1005A Force Main: [ ]

FLOW DATA

Start Date: 12/2/2011 Time: 8:30 AM [X] PM [ ] End Date: 12/2/2011 Time: 8:30 AM [X] PM [ ]

Duration ? hours/minutes Est. Flow Rate: ? gpm Estimated Total Flow: 2000 gallons

CAUSES

(Check all that apply)

Rainfall [X] [Estimated amount 4.8 in] Power Outage [ ] Equipment Failure [ ]

Broken Sewer [ ] Blocked line from Roots [ ] Grease [ ] Collapse [ ] Other [ ]

Explain causes of overflow: Evidence of overfow found at 8:30am.Do to excessive rainfall of 4.8" in a 36 hr. period. 11/27-11/28/2011

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded [ ] Nozzle [ ] Root Saw [ ] Lid Removed [ ] Limed [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 Melton Hill Lake

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: Brian Simmons

Report completed by Brian L Simmons Title: Utility Specialist Date: 12-2-11

Reviewed by Rick Lauria Title: Operations & Maint. Manager Date: 12/2/11

Initial TDEC Notification By: Brian Simmons Date: 12-2-11 VKS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12.2.11

Final Review [signature] Title: Public Works Director Date: 12/2/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/2/11

CITY OF OAK RIDGE

REPORT DATE: 12/7/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 119 Athens Rd. 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/28/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E11 Map Page # E22 Manhole # New-E22-32 Old-D1018 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 9:32 AM ☒ PM ☐ End Date: 12/7/2011 Time: 1:30 AM ☐ PM ☒

Duration 3hrs.58min. hours/minutes Est. Flow Rate: 30 gpm Estimated Total Flow: 7,140 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.1" rain in 40 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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 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: Mark Maples, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/7/11

Reviewed by Rick Lawson Title: Operations/Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/7/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 151 Cairo Ln. 1st Occurrence at this location? Y ☐ N ☑

If No, Date of Last Occurrence 11/28/2011

POINT OF OCCURANCE

Manhole ☑ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E13B Map Page # G22 Manhole # G22-14 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 8:47 AM ☑ PM ☐ End Date: 12/7/2011 Time: 1:16 AM ☐ PM ☑

Duration 4hrs.29min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 26,900 gallons

CAUSES

(Check all that apply)

Rainfall ☑ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.1"rain in 40 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☑ 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: Emies 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: Mark Maples, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/7/11

Reviewed by Rick Lawson Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 ✓

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-8-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/7/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 100 Dresden Rd. 1st Occurrence at this location? Y N

If No, Date of Last Occurrence 11/28/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E13A Map Page # F20 Manhole # F-701A Force Main:

FLOW DATA

Start Date: 12/7/2011 Time: 9:00 AM PM End Date: 12/7/2011 Time: 10:44 AM PM

Duration 1hr.44min. hours/minutes Est. Flow Rate: 3 gpm Estimated Total Flow: 312 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 2.1 In] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 2.1" rain in 40 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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 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: Mark Maples, Earnest Bailey

Report completed by Wayland Patterson Title: Sewer Maint Specialist Date: 12/7/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review Doug Conder Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/7/2011 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 11/28/2011

POINT OF OCCURANCE

Manhole ☐ Clean Out ☐ In-House Backup ☐ Lift Station Name: **None** or **None** or **None**

If Manhole; Give Mini-system # **W18A** Map Page # **J11** Manhole # **J11-16** Force Main: ☐

FLOW DATA

Start Date: **12/7/2011** Time: **9:10** AM ☐ PM ☐ End Date: **12/7/2011** Time: **12:00** AM ☐ PM ☐

Duration **2hrs.50min.** hours/minutes Est. Flow Rate: **30** gpm Estimated Total Flow: **5,100** gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount **2.1** in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: **Excessive rainfall 2.1" rain in 40 hr. period**

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Robert Powell**

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/7/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC **Notification** By: **David Patterson** Date: **12/7/2011**

After Review & Notification to **TDEC** Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/8/2011 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 11/28/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E20 Map Page # L24 Manhole # L24-1 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 8:12 AM ☒ PM ☐ End Date: 12/7/2011 Time: 5:30 AM ☐ PM ☒

Duration 9hrs. 18min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 55,800 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.1" rain in 40 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Robert Powell

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/8/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/8/2011 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 11/28/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G11 Manhole # New-G11-8 Old-D3 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 8:40 AM ☒ PM ☐ End Date: 12/7/2011 Time: 1:47 AM ☐ PM ☒

Duration 5hrs.7min. hours/minutes Est. Flow Rate: 100 gpm Estimated Total Flow: 30,700 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.1" rain in 40 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Robert Powell

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/8/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011

After Review & Notification to TDEC Scott Parker Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/8/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 1403 Oak Ridge Tumpike 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence 11/28/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New-G12-2 Old D5 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 8:44 AM ☒ PM ☐ End Date: 12/7/2011 Time: 11:32 AM ☒ PM ☐

Duration 2hrs.48min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 8,400 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.1" rain in 40 hr.period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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, Robert Powell

Report completed by Wayne Patterson Title: Sewer Maint. Specialist Date: 12/8/11

Reviewed by Rick Lewis Title: Operations + Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 - KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/8/2011 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 11/28/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5 Map Page # G12 Manhole # New-G12-1 Old-D4 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 8:42 AM ☐ PM ☐ End Date: 12/7/2011 Time: 11:32 AM ☐ PM ☐

Duration 2hrs.50min. hours/minutes Est. Flow Rate: 20 gpm Estimated Total Flow: 3,400 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.1" rain in 40 hr.period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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, Robert Powell

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/8/11

Reviewed by Rick Lawrence Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/8/2011 VS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/8/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 470 Oak Ridge Turnpike 1st Occurrence at this location? Y ☐ N ☒

If No, Date of Last Occurrence: 11/28/2011

POINT OF OCCURANCE

Manhole ☒ Clean Out ☐ In-House Backup ☐ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E10 Map Page # F20 Manhole # F20-25 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 9:49 AM ☒ PM ☐ End Date: 12/7/2011 Time: 11:06 AM ☒ PM ☐

Duration 1hr.17min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 3,850 gallons

CAUSES

(Check all that apply)

Rainfall ☒ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: Excessive rainfall 2.1"rain in 40 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☒ 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: Emies 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: Mark Maples, Earnest Balley

Report completed by R. David Patterson Title: Sewer Maint. Specialist Date: 12/8/11

Reviewed by Ted Lewis Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 ✓ KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/7/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

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

If No, Date of Last Occurrence 11/28/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # E13A Map Page # G20 Manhole # F-702 Force Main: ☐

FLOW DATA

Start Date: 12/7/2011 Time: 9:15 AM ☐ PM ☐ End Date: 12/7/2011 Time: 1:25 AM ☐ PM ☐

Duration 4hrs.10min. hours/minutes Est. Flow Rate: 50 gpm Estimated Total Flow: 12,500 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount 2.1 in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: excessive rainfall 2.1" rain in 40 hr period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded ☐ Nozzle ☐ Root Saw ☐ Lid Removed ☐ Limed ☐ 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: Emies 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: Mark Maples, Earnest Bailey

Report completed by David Patterson Title: Sewer Maint Specialist Date: 12/7/11

Reviewed by [signature] Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 ✓ KS

After Review & Notification to TDEC [signature] Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/8/2011 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 11/28/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W5A Map Page # G15 Manhole # G15-13 Force Main:

FLOW DATA

Start Date: 12/7/2011 Time: 8:28 AM PM End Date: 12/7/2011 Time: 3:25 AM PM

Duration 6hrs. 57min. hours/minutes Est. Flow Rate: 200 gpm Estimated Total Flow: 83,400 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 2.1 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 2.1" rain in 40hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Robert Powell

Report completed by Wayne Patterson Title: Sewer Maint. Specialist Date: 12/8/11

Reviewed by Rick Drum Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-8-11

Final Review Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/8/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 191 Tusculum Dr. 1st Occurrence at this location? Y N

If No, Date of Last Occurrence 11/28/2011

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W19 Map Page # H11 Manhole # H11-4 Force Main:

FLOW DATA

Start Date: 12/7/2011 Time: 9:14 AM PM End Date: 12/7/2011 Time: 11:50 AM PM

Duration 2hrs.36min. hours/minutes Est. Flow Rate: 10 gpm Estimated Total Flow: 1,560 gallons

CAUSES

(Check all that apply)

Rainfall [Estimated amount 2.1 in] Power Outage Equipment Failure

Broken Sewer Blocked line from Roots Grease Collapse Other

Explain causes of overflow: Excessive rainfall 2.1" rain in 40 hr. period

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

Line was: Jet Rodded Nozzle Root Saw Lid Removed Limed 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, Robert Powell

Report completed by Wayne Patterson Title: Sewer Maint. Specialist Date: 12/8/11

Reviewed by Rick Irwin Title: Operations & Maint. Manager Date: 12/8/11

Initial TDEC Notification By: David Patterson Date: 12/7/2011 / RS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-9-11

Final Review [signature] Title: Public Works Director Date: 12/9/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/9/11

CITY OF OAK RIDGE

REPORT DATE: 12/20/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 107 Salem Rd. 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence:

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W14 Map Page # D5 Manhole # D5-58 Force Main: ☐

FLOW DATA

Start Date: 12/19/2011 Time: 2:35 AM ☐ PM ☐ End Date: 12/19/2011 Time: 3:00 AM ☐ PM ☐

Duration 25min. hours/minutes Est. Flow Rate: 2 gpm Estimated Total Flow: 50 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow:

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☒ Other:

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☐ Name of surface water:

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,Anthony Morris,Mark Maples

Report completed by David Patterson Title: Sewer Maint. Specialist Date: 12/19/11

Reviewed by Rick Lewis Title: Operations & Maint. Manager Date: 12/21/11

Initial TDEC Notification By: David Patterson Date: 12/19/2011 KS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-22-11

Final Review [signature] Title: Public Works Director Date: 12/22/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/22/11

CITY OF OAK RIDGE

REPORT DATE: 12/22/2011 **SANITARY SEWER OVERFLOW FINAL REPORT** NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 102 Connors Pl. 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence:

POINT OF OCCURANCE

Manhole ☐ Clean Out ☐ In-House Backup ☒ Lift Station Name: None or None or None

If Manhole; Give Mini-system # E33 Map Page # M18 Manhole # Force Main: ☐

FLOW DATA

Start Date: 12/21/2011 Time: 12:15 AM ☐ PM ☒ End Date: 12/21/2011 Time: 12:20 AM ☐ PM ☒

Duration 5 Mins hours/minutes Est. Flow Rate: 1 gpm Estimated Total Flow: 5 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☒

Explain causes of overflow: City contractor vacuum testing manhole M-18-8 plugged off the lateral to102 Connors Pl. Home owner started taking a shower upstairs and water came out into the downstairs bathroom toilet.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☐ Other: Contractor has been instructed to contact the homeowners before plugging off any laterals.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☒ Name of surface water:

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

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

Other (describe) Water was confined to the bathroom,laundry room and hallway.

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

Names of Responders: Jim Dudley ITG, Joe Abernathy Cully Construction, Conrad Majors LD&A

Report completed by Rick Irwin Title: Operations & Maint. Manager Date: 12/22/11

Reviewed by _____ Title: _____ Date: _____

Initial TDEC Notification By: Rick Irwin Date: 12/22/2011 RCS

After Review & Notification to TDEC Scott Jackson Title: Operations Manager Date: 12-22-11

Final Review _____ Title: Public Works Director Date: 12/22/11

Final Report Transmitted to TDEC By: Kathy Stout Date: 12/22/11

CITY OF OAK RIDGE

REPORT DATE: 12/27/2011 SANITARY SEWER OVERFLOW FINAL REPORT NPDES PERMIT # TN0024155

LOCATION DATA

LOCATION: 103 Newark Ln. 1st Occurrence at this location? Y ☒ N ☐

If No, Date of Last Occurrence:

POINT OF OCCURANCE

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

If Manhole; Give Mini-system # W17 Map Page # B-2 Manhole # Force Main: ☐

FLOW DATA

Start Date: 12/23/2011 Time: 10:40 AM ☐ PM ☐ End Date: 12/23/2011 Time: 10:50 AM ☐ PM ☐

Duration 10 mins hours/minutes Est. Flow Rate: 1 gpm Estimated Total Flow: 10 gallons

CAUSES

(Check all that apply)

Rainfall ☐ [Estimated amount in] Power Outage ☐ Equipment Failure ☐

Broken Sewer ☐ Blocked line from Roots ☐ Grease ☐ Collapse ☐ Other ☐

Explain causes of overflow: House had been demolished 8/26/2010. Plug was installed in the lateral that comes into the sewer manhole. House was rebuilt a 1.5 years latter. Sewer plug was still in the sewer lateral creating a blockage. Water that was used up stairs went into the basement.

REMEDIAL MEASURES TO CORRECT, PREVENT OR MINIMIZE FUTURE OCCURANCES

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

Line will be: cleaned and TV'd for needed repair: ☐ Other: Sewer plug was removed and sewer was cleaned up.City's insurance adjuster was contacted.

WHERE DID DISCHARGE GO (Check all that apply)

Did flow run to surface water: Yes ☐ No ☐ Name of surface water:

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

Basement Back-up ☐ No. of basements 1 Use (i.e., commercial, residential) Residential

Other (describe) Water was confined to the basement.

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

Names of Responders: Trevor Gallaher

Report completed by Rick Irwin Title: Operations & Maint Manager Date: 12/27/11

Reviewed by Jim Dalbert Title: Sewer Maint Crewchief Date: 12/27/11

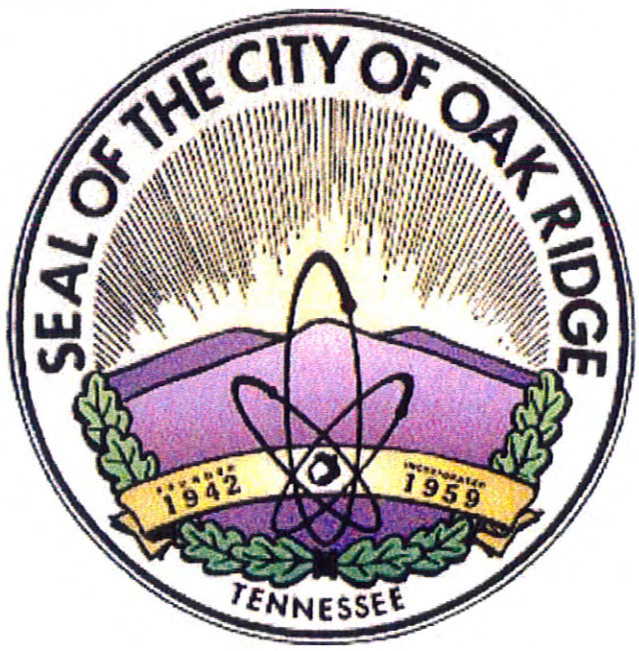
Initial TDEC Notification By: Rick Irwin Date: 12/27/2011

After Review & Notification to TDEC _____ Title: Operations Manager Date:

Final Review _____ Title: Public Works Director Date: 12/28/11

Final Report Transmitted to TDEC By: _____ Date: 12.28.11

APPENDIX B: DOE Quarterly Report



Status of Y-12 National Security Complex
Sanitary Sewer Inflow and Infiltration Program
December 31, 2011

Background

The City of Oak Ridge (COR), Tennessee, issues the Y-12 National Security Complex (Y-12 Complex) a permit to discharge wastewater into the collection system for the COR Publicly Owned Treatment Work (POTW). As a condition of discharge to the COR POTW, the Y-12 Complex is limited to a maximum discharge of 1.4 million gallons per day. Over the last several years, this limit has been exceeded on occasion due to significant rain events. The increased flow in the Y-12 Complex sanitary sewer system during rain events occurs as a result of both surface inflow and underground infiltration (I&I) of storm water.

Actions Taken Since Previous Report (September 30, 2011)

Storm water runoff from the site of the old coal pile has been diverted from the Steam Plant Wastewater Treatment Facility (SPWTF) to the storm drain system. Discharge from the SPWTF is authorized to enter the sanitary sewer system; however, since the completion of the coal pile project, discharges from this facility are minor and infrequent.

As noted in the previous quarterly report, smoke testing revealed several sources of inflow around the concrete pad that was once the Y-12 Complex garage. These were removed via plugging the lateral pipe in a nearby manhole.

Four flow monitors have been installed at key locations in the Y-12 Complex sanitary sewer system and meaningful data has been collected. Of the four locations, three measured an increase in flow due to rain events. The flow meter in the location that did not show a problem has been relocated into a branch to better identify the source of inflow in one of the areas identified as having an increase in flow in response to a rain event. Five additional flow monitors have been procured.

Based on data collected from the flow monitors, follow-up smoke testing was conducted in the western portion of the Y-12 Complex. As a result of the smoke test, seven repairs were made ranging from replacing broken or missing clean-out caps, repair of broken pipe and replacement of rain catchers in manholes. While these repairs indicated some improvement in this area, they did not identify all of the inflow sources. An additional flow meter will be placed in this area to aid in this endeavor.

Observations during a rain event revealed that storm water inflow was present in a large (15") abandoned sewer line that runs parallel to Bear Creek Road. Temporary controls have been installed and a permanent plugging method has been identified.

A section of the sanitary sewer system on the north side of Building 9720-16 was isolated. This was allowing inflow from an old drum storage yard that has been recently remediated. It is suspected that the heavy equipment in this area during the remediation project caused a compromise of the sewer line.

Planned Future Actions

While notable progress has been made in reducing I&I to the Y-12 Complex sanitary sewer system, there are additional actions planned. These actions are as follows:

- Permanently isolate the abandoned 15" line that parallels Bear Creek Road. Weather permitting, this activity is currently planned for January 2012.
- The additional flow meters will be installed in key locations in the sewer system. Data from the original four installations has produced valuable information as to where inflow may be originating.
- Localized smoke testing will be conducted based on the results of the flow monitoring.
- In highly suspect areas, if practical, a video camera will be used to determine pipe conditions and possible cross connections.