Louisville and Jefferson County Wet Weather Consent Decree Quarterly Report #28



<u>Reporting Period:</u>

July 1, 2012 through September 30, 2012

Submitted To:

Kentucky Department of Environmental Protection

United States Environmental Protection Agency

United States Department of Justice

Submitted By:

Louisville and Jefferson County Metropolitan Sewer District 700 W. Liberty Street Louisville, Kentucky 40203-1911

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TABLE OF CONTENTS

INTRO	DUCTION	4
SECTIO	ON 1: Program Activities for Nine Minimum Controls	5
1.1	Nine Minimum Controls Program Background	5
1.2	NMC 2: Maximization of Storage in the Collection System	5
1.3	NMC 4: Maximization of Flow at the Morris Forman Water Quality Treatment	:
	Center (WQTC)	5
SECTIO	ON 2: Program Activities for Sewer Overflow Response Protocol	15
2.1	SORP Program Background	15
2.2	Overflow Management and Field Documentation	15
2.3	Staff Training and Communication	16
SECTIO	ON 3: Program Activities for Discharge Abatement Plans	17
3.1	Integrated Overflow Abatement Plan (IOAP)	17
3.2	Sanitary Sewer Discharge Plan (SSDP)	17
3.2	2.1 Updated Sanitary Sewer Overflow Plan Implementation	17
3.2	2.2 Interim Sanitary Sewer Discharge Plan	17
3.2	2.3 Final Sanitary Sewer Discharge Plan	17
3.3	CSO Long Term Control Plan	18
3.3	3.1 Interim CSO Long Term Control Plan	18
3.3	3.2 Final CSO Long Term Control Plan	18
3.3	3.3 Green Program Update	18
3.4	Activity Progress Chart	19
SECTIO	ON 4: Program Activities for Public Outreach, Education, Notification	and
Particip	pation	25
4.1	Public Notification Program	25
4.2	Public Education Programs	25
4.3	Public Outreach Programs	25
4.3	3.1 IOAP Project and Program Meetings	25
SECTIO	ON 5: Capacity Management Operations and Maintenance Report	26
5.1	Management Programs	26
5.2	Operations Programs	26
53	Comprehensive Performance Evaluations and Composite Correction Plans	

ensive Performance Evaluations and Composite Correction Plans 5.3





(Cł	PE/CCP)	26
5.3.1	Hite Creek Water Quality Treatment Center	27
5.3.2	Floyds Fork Water Quality Treatment Center	27
5.3.3	Derek R. Guthrie Water Quality Treatment Center	27
5.3.4	Cedar Creek Water Quality Treatment Center	27
5.3.5	Prospect Area Water Quality Treatment Center Updates	27
5.3.5.1	Timberlake Water Quality Treatment Center	28
5.3.5.2	Hunting Creek North Water Quality Treatment Center	28
5.3.5.3	Hunting Creek South Water Quality Treatment Center	28
5.3.5.4	Ken Carla Water Quality Treatment Center	28
5.3.5.5	Shadow Wood Water Quality Treatment Center	29
5.3.6	Jeffersontown Water Quality Treatment Center	29
5.3.7	Starview Water Quality Treatment Center	29
5.3.8	Berrytown Water Quality Treatment Center	29
5.3.9	Chenoweth Hills Water Quality Treatment Center	29
5.3.10	Other Water Quality Treatment Centers	30
5.4 CIV	OM Activity Schedule	30
5.4 CM	OM Activity Schedule Project WIN Performance Overview	30 34
5.4 CM SECTION 6 6.1 Ra	OM Activity Schedule : Project WIN Performance Overview infall	30 34 34
5.4 CM SECTION 6 6.1 Ra 6.2 Co	OM Activity Schedule : Project WIN Performance Overview infall bllection System Unauthorized Discharges	30 34 34 34
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1	OM Activity Schedule : Project WIN Performance Overview infall bilection System Unauthorized Discharges Collection System Overflows to Waters of the United States (WUS)	30 34 34 34 34
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1 6.2.2	OM Activity Schedule Project WIN Performance Overview infall ollection System Unauthorized Discharges Collection System Overflows to Waters of the United States (WUS) Overflows to Ground (EXT)	30 34 34 34 34 35
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1 6.2.2 6.2.3	OM Activity Schedule Project WIN Performance Overview infall ollection System Unauthorized Discharges Collection System Overflows to Waters of the United States (WUS) Overflows to Ground (EXT) Overflows to Interior (INT)	30 34 34 34 35 35
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1 6.2.2 6.2.3 6.2.4	OM Activity Schedule Project WIN Performance Overview infall Dilection System Unauthorized Discharges Collection System Overflows to Waters of the United States (WUS) Overflows to Ground (EXT) Overflows to Interior (INT) Dry Weather CSOs	30 34 34 34 35 35 35
5.4 CM SECTION 6 6.1 Ra 6.2.1 6.2.2 6.2.3 6.2.3 6.2.4 6.3 CS	OM Activity Schedule Project WIN Performance Overview	30 34 34 34 35 35 35 36
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1 6.2.2 6.2.3 6.2.3 6.2.4 6.3 Ca 6.4 S	OM Activity Schedule Project WIN Performance Overview	30 34 34 34 35 35 35 36 36
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1 6.2.2 6.2.3 6.2.3 6.2.4 6.3 Ca 6.4 S 6.5 Gra	OM Activity Schedule Project WIN Performance Overview	30 34 34 34 35 35 35 36 36 36
5.4 CM SECTION 6 6.1 Ra 6.2 Ca 6.2.1 6.2.2 6.2.3 6.2.4 6.3 Ca 6.4 S 6.4 S 6.5 Gra 6.6 Wa	OM Activity Schedule Project WIN Performance Overview	30 34 34 34 35 35 35 36 36 36 37
5.4 CM SECTION 6 6.1 Ra 6.2 Ca 6.2.1 6.2.2 6.2.3 6.2.3 6.2.4 6.3 Ca 6.4 S 6.5 Gra 6.6 Wa 6.6.1	OM Activity Schedule Project WIN Performance Overview	30 34 34 35 35 35 36 36 37 37
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1 6.2.2 6.2.3 6.2.3 6.2.4 6.2.4 6.2.4 6.2.4 6.2.4 6.2.4 6.2.4 6.2.4 6.5 Gra 6.6 Wa 6.6.1 6.6.2	OM Activity Schedule Project WIN Performance Overview	30 34 34 34 35 35 35 36 36 36 37 37 38
5.4 CM SECTION 6 6.1 Ra 6.2 Co 6.2.1 6.2.2 6.2.3 6.2.4 6.2.4 6.2.4 6.2.4 6.2.4 6.2.4 6.2.4 6.5 Gra 6.6 Wa 6.6.1 6.6.2 6.6.3	OM Activity Schedule :: Project WIN Performance Overview	30 34 34 34 35 35 35 36 36 36 37 37 38 39





ATTACHMENTS

APPENDIX A-1 DISCHARGE WORK ORDERS-DRY WEATHER CSOS APPENDIX A-2 DISCHARGE WORK ORDERS-BYPASS APPENDIX A-3 DISCHARGE WORK ORDERS-BLENDING APPENDIX B-CSO FLOW MONITORING DATA APPENDIX C-ACRONYMS





INTRODUCTION

The Louisville and Jefferson County Metropolitan Sewer District (MSD) has entered into an Amended Consent Decree with the Kentucky Department of Environmental Protection (KDEP) and the United States Environmental Protection Agency (EPA). The Amended Consent Decree was signed by United States District Judge Simpson on April 10, 2009, and filed in United States District Court, Western Division of Kentucky, Louisville Division, on April 15, 2009.

This is the twenty-eighth Quarterly Report submitted in accordance with Paragraph 29 of the Amended Consent Decree. This report covers the time period from July 1, 2012, through September 30, 2012. **The structure for this report is outlined as follows:**

Section 1: Program Activities for Nine Minimum Controls (NMC) - This section describes the data collected for NMC 2 – Maximization of Storage in the Collection System, and NMC 4 – Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC) that were active during the reporting period (July 1, 2012, through September 30, 2012).

Section 2: Program Activities for Sewer Overflow Response Protocol (SORP) - This section describes the training attendance records, overflow data, and overflow reconnaissance inspection routes related to SORP that were active during the reporting period (July 1, 2012, through September 30, 2012).

Section 3: Program Activities for Discharge Abatement Plans (DAP) - This section describes the schedule and status for projects related to the DAP by means of an updated Gantt chart for active DAP projects during the reporting period, and the anticipated projects and activities that are scheduled for continued compliance with the Amended Consent Decree.

Section 4: Program Activities for Public Outreach, Education, Notification and **Participation** - This section describes the activities related to public outreach that were active during the reporting period (July 1, 2012, through September 30, 2012).

Section 5: Capacity Management, Operations and Maintenance Report - The CMOM program activities and programmatic activities for WQTCs generating capital projects will be reported in a Gantt chart for the reporting period (July 1, 2012, through September 30, 2012), and include the schedule for activities planned for the next two reporting periods (October 1, 2012, through March 31, 2013), are included in this section for continued compliance with the Amended Consent Decree.

Section 6: Performance Overview - This section provides an accounting of unauthorized discharge occurrences from the separate sanitary sewer and combined sewer system and the estimated volumes of each. A discussion of the probable reductions in both unauthorized discharge points and the discharges from MSD's Combined Sewer Overflow (CSO) locations, identified in the Morris Forman Water Quality Treatment Center (WQTC) Kentucky Pollutant Discharge Elimination System (KPDES) permit, that are expected to result from MSD's projects and activities during the reporting period are also contained in this section. Performance information on Jeffersontown WQTC blending events, bypasses at WQTCs, DMR information, and phosphorus monitoring at WQTCs is included in this section.





SECTION 1: Program Activities for Nine Minimum Controls

1.1 Nine Minimum Controls Program Background

Per Paragraph 24.a. of the Amended Consent Decree, the Nine Minimum Controls (NMC) Compliance Report was initially submitted to EPA and KDEP on February 10, 2006. MSD received an approval letter, dated February 22, 2007, for the NMC Compliance Report. The approved NMC Compliance document can be viewed on the MSD Project WIN website <u>http://www.msdprojectwin.org</u>. Highlights of the NMC program implementation over this reporting period are outlined below.

1.2 NMC 2: Maximization of Storage in the Collection System

Continued operation of Phase 1 and Phase 2 of the Real Time Control system. During this reporting period, approximately 369.2 MG were stored in the system during rain events and routed to the Morris Forman WQTC once the system was able to handle the flow. See the figure at the end of this section for a detailed report.

1.3 NMC 4: Maximization of Flow at the Morris Forman Water Quality Treatment Center (WQTC)

The following charts illustrate performance in maximizing flow to the Morris Forman WQTC. The top of the chart shows rainfall inches per day. The middle part of the chart shows Morris Forman WQTC effluent flow, secondary treatment flow, and secondary bypass flow. The bottom of the chart shows days with a CSO activation at the five CSOs in the vicinity of the Morris Forman WQTC (CSOs 015, 016, 191, 210, and 211). Note that the flow meter downstream from CSO 211 is known to be affected by backwater effects of the Ohio River and the ultrasonic signal is sometimes blocked by mist and condensation when air and sewage temperatures are significantly different, so CSO activations at CSO 211 are keyed to water levels upstream and downstream of the inflatable dam in the Main Diversion Structure. The other CSO activations are tied to flow measurement downstream of the respective CSOs. There are occasions in which a communications failure with telemetry has led to short-term gaps in the data.

Problems with bar screens in the East Headworks occurred, resulting in reductions in the capacity of the East Headworks throughout the entire reporting period. In the West Headworks problems in the grit channels also impacted overall capacity for most of the reporting period. During most rain events the plant was able to process in excess of 260 MGD before localized CSOs occurred. On August 22 all three grit channels in the West Headworks were out of service for repair, reducing the plant capacity to 120 MGD. A rain event on this day caused a brief overflow at two CSOs during this period of reduced plant capacity. The on-going evaluation of headworks performance and reliability will review the West Headworks bar screens, West Headworks grit channels, and the East Headworks bar screens.







































counts 8:0:0:0:0 10:0:00













Work continued on an evaluation of the primary sedimentation basin sludge and scum pumping systems, and the East and West Headworks screening and grit removal systems. It is not anticipated that these evaluations will require any significant equipment down-time. If repair or replacement activities are recommended as a result of the evaluations they will be scheduled in accordance with plant maintenance priorities.

There were no KPDES permit violations at Morris Forman WQTC during July, August, or September, 2012.

During this reporting period, the following activities were continued and/or completed:

- <u>Main Diversion Structure Flow Measurement</u> Continued to monitor measurement accuracy over several storms. A revised "parking" elevation for Sluice Gate 1 was identified to improve flow measurement at low flows without compromising the ability to maximize capture of initial flow peaks. This revised elevation was not implemented at this time, pending completion of repairs to the secondary by-pass flume. It is anticipated that Sluice Gate 1 will be incorporated into an automatic flow control system linked to the Southwestern Pump Station as part of the Paddy's Run Wet Weather Treatment Facility project currently scheduled for completion in 2014.
- <u>Wet Weather Operational Plan</u> Continued training on the new SOPs. The stress test report evaluating the impact of hydraulic loading, solids loading, and sludge blanket depth on secondary clarifier performance was finalized. Wet weather SOP training and revisions to the Morris Forman WQTC Capacity Calculator will be implemented after completion of the secondary clarifier flow meter replacement project.
- <u>RTC System-Wide Optimization Project</u> Some minor revisions to the RTC design standards were made. It is anticipated that the design standards will be a "living document" subject to periodic revisions as needed. Continued development of integrating the Northern Ditch Diversion into the RTC system, and changing control algorithms for the Southeast Diversion Structure. It is expected that this integration will be completed during the next two reporting periods, as the Highgate Springs Pump Station is taken off line and the Southeast Interceptor Relief project is completed, both in accordance with the Interim Sanitary Sewer Discharge Plan.





1

WET WEATHER STORAGE IN THE MORRIS FORMAN SEWER SYSTEM VIA THE RTC SYSTEM

Period							
From :	07/01/2012						
To:	09/30/2012						

	Wet	Weather Event		F	Rainfall				Wet Weather St	orage Volu	me (MG)			Link	
Event Number	Start Date	End Date	Duration	Average* TRFD (in)	M TRFD (in)	ax** Rain Gauge	SWPS SG Chamber	SWOR2	Brady Lake and Executive Inn Storage	Southern Outfall	Ohio River Interceptor	Sneads Branch	Total	River Levels	
2012-045	7/1/12 20:25	7/2/12 7:30	11:05	0.26	0.62	TR15	3.1	0.0	0.5	4.4	3.2	0.9	12.1	no	SWOR2 manually controlled with both gates duration, moderate intesity rainfall predomina
2012-047	7/5/12 2:20	7/5/12 11:35	9:15	0.01	0.04	TR04	6.1	0.0	0.0	3.3	2.2	0.0	11.6	no	SWOR2 manually controlled with both gates duration, moderate intensity storm cells occur
2012-048	7/8/12 13:35	7/9/12 1:45	12:10	0.03	0.14	TR05	0.5	0.0	0.6	4,4	4.1	0.0	9.5	no	SWOR2 manually controlled with both gates intensity storm event occurring in western an
2012-049	7/12/12 17:15	7/13/12 2:00	8:45	0.12	0.47	TR11	8.0	0.0	0.1	0.0	0.0	0.0	8.1	no	SWOR2 manually controlled with both gates duration, high intensity rainfall occuring prede
2012-050	7/14/12 12:25	7/15/12 10:00	21:35	0.71	1.39	TR11	12.5	0.0	2.0	4.4	3.8	1.6	24.3	no	SWOR2 manually controlled with gates in op
2012-052	7/18/12 16:35	7/19/12 9:45	17:10	0.38	0.66	TR15	0.0	0.0	0.0	1.4	2.5	0.2	4.0	no	SWOR2 manually controlled with both gates duration, high intensity storm cells with dewa and eastern reaches of collections system;
2012-053 & 054	7/19/12 18:25	7/21/12 2:45	32:20	1.19	2.07	TR04	25.3	0.0	9.1	8.5	6.6	2.2	51.7	no	SWOR2 manually controlled with both gates consecutive storm cell with dewatering betwee
2012-055	7/24/12 20:35	7/25/12 6:45	10:10	0.05	0.19	TR12	0.0	0.0	1.8	3.7	3.4	0.5	9.4	no	SWOR2 manually controlled with both gates duration, moderate intesity rainfall predomina
2012-056	7/26/12 22:10	7/28/12 19:40	45:30	0.84	1.30	TR14	13.3	0.0	3.5	3.7	3.6	1.4	25.5	no	SWOR2 manually controlled with both gates
2012-057	8/3/12 2:45	8/4/12 1:50	23:05	0.40	0.79	TR15	1.9	0.0	0.3	1.1	2.1	0.0	5.3	no	SWOR2 manually controlled with both gates
2012-061	8/16/12 20:45	8/17/12 10:45	14:00	0.65	0.75	TR11	12.5	0.0	2.0	4.3	3.8	0.7	23.3	no	SWOR2 manually controlled with both gates
2012-062	8/21/12 14:25	8/22/12 3:35	13:10	0.12	0.26	TR12	4.1	0.0	1.0	4.3	4.2	0.7	14.3	no	SWOR2 manually controlled with both gates duration, moderate intensity storm event through the store of the
2012-064, 65 & 66	9/1/12 13:00	9/4/12 14:40	73:40	1.41	2.07	TR15	29.7	0.0	3.9	13.2	10.3	2.8	59.9	no	SWOR2 manually controlled with both gates consecutive storm cells with dewatering betw
2012-067	9/5/12 15:55	9/7/12 23:50	55:55	0.91	1.38	TR04	13.5	0.0	2.3	3.8	3.8	1.3	24.6	no	SWOR2 manually controlled with both gates
2012-068	9/7/12 23:50	9/9/12 11:35	35:45	1.38	2.00	TR04	13.2	0.0	2.2	5.6	4.9	0.9	26.8	no	SWOR2 manually controlled with both gates consecutive storm cell with dewatering betwee
2012-070	9/25/12 9:00	9/28/12 8:20	71:20	1.43	2.91	TR04	28.4	0.0	6.1	11.1	10.6	2.8	59.0	no	SWOR2 manually controlled with one gate op consecutive storm cells with dewatering betw
TOTAL							172.0	0.0	35.3	77.1	68.9	16.0	369.2		

* Average Total Rainfall Depth Based on Rain Gauge TR04, TR05, TR11, TR12, TR13, TR14 and TR15

** Maximum Total Rainfall Depth Measurement and its Location during the Wet Weather Event

*** MDS is always manually controlled by operator

**** SW OR2 experienced both flow meter and gate level sensor failures. The flow meter has been repaired, the level sensor will be addressed durnig the next reportiong period.







SECTION 2: Program Activities for Sewer Overflow Response Protocol

2.1 SORP Program Background

Per Paragraph 24.d. of the Amended Consent Decree, MSD initially submitted the Sewer Overflow Response Protocol (SORP) to EPA and KDEP on February 10, 2006, and received comments on March 13, 2006.

MSD completely revised the SORP documentation in 2011. The draft of this revised document was submitted for comment on August 22, 2011. Comments from the EPA and KDEP were received and addressed, and the document was resubmitted October 28, 2011. Final approval of the updated SORP document was received February 21, 2012. A hard copy of the approved document has been distributed to each division throughout MSD and a viewable, downloadable electronic version has been posted to the MSD Project WIN website www.msdprojectwin.org.

The current approved SORP document is now dated February 21, 2012, and can be viewed on the MSD Project WIN website <u>www.msdprojectwin.org</u>. Updates to the SORP document were submitted in August 2012, with confirmation of approvals on October 25, 2012. The following activities were performed during this reporting period.

2.2 Overflow Management and Field Documentation

 Monitored approximately 158 sanitary sewer overflow (SSO) sites, which have been grouped into routes based on the range of rainfall rates necessary to cause a SSO. These routes are monitored during rain events depending on the magnitude and location of the storm. If an overflow is observed, a Discharge Work Order is created to document the event. During this quarter, Regulatory Services and Engineering staff documented 10 unauthorized discharges through route reconnaissance. Inspection routes were run during rain events as described in the following table:

Route Description	07/02/12	07/14/12	07/19/12	08/16/12	09/01/12	09/03/12	09/06/12	09/08/12	09/26/12
RS Hikes Point SSO Inspection Route	х	х	х	х		х	x	x	х
RS Middle/Muddy Fork SSO Inspection Route		x			х	х		х	х

 Due to Capacity related issues, during this reporting period, MSD Metro Operations staff hauled 53,701 gallons of sewage. MSD also hauled due to other issues as indicated in the following table:





MSD Haule	MSD Hauled Volumes In Gallons (July 1, 2012 - September 30, 2012)									
Problem	July	August	September	Total						
CAPACITY	5,000	0	48,701	53,701						
MECHANICAL	28,000	0	9,900	37,900						
STRUCTURAL	0	0	18,900	18,900						
Total	33,000	0	77,501	110,501						

2.3 Staff Training and Communication

- Reviewed and updated the training documentation for the 2012 third quarter SORP training that included Cleanup and Public Notification.
- Commenced planning for the 2012 fourth quarter SORP training that will focus on Overflow Field Documentation and Reporting.
- Conducted the following SORP Quarterly training sessions which were attended by 266 employees.

Staff Training Participation	on - July 1, 2012 -	September 30, 2012
Division	Date	Number of Attendees
Morris Forman Staff	9/5/2012	11
Morris Forman Staff	9/5/2012	32
Metro Operations Staff	9/5/2012	20
Morris Forman Staff	9/6/2012	17
Metro Operations Staff	9/6/2012	26
Morris Forman Staff	9/6/2012	14
Morris Forman Staff	9/12/2012	14
Morris Forman Staff	9/13/2012	8
Engineering/RS Staff	9/13/2012	42
I&FP Staff	9/14/2012	7
Engineering/RS Staff	9/20/2012	50
I&FP Staff	9/21/2012	25
Total:		266





SECTION 3: Program Activities for Discharge Abatement Plans

3.1 Integrated Overflow Abatement Plan (IOAP)

As a requirement of the Amended Consent Decree, per Paragraph 25, MSD is to prepare and submit for review and approval discharge abatement plans for the elimination of unauthorized discharges from the separate sanitary sewer system and the combined sewer system, the reduction and control of discharges from the CSO locations identified in the Morris Forman WQTC KPDES permit, and the improvement of water quality in the receiving waters.

The Final Sanitary Sewer Discharge Plan and the Final CSO Long Term Control Plan were submitted concurrently and certified on December 19, 2008, under the title of the Integrated Overflow Abatement Plan (IOAP). The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010.

MSD submitted an IOAP modification request to EPA/KDEP on September 20, 2012 with partial approval granted via certified letter on October 25, 2012.

3.2 Sanitary Sewer Discharge Plan (SSDP)

The Sanitary Sewer Discharge Plan (SSDP) addresses the overflows and unauthorized discharges from the separate sanitary sewer system. Three separate plans have been submitted under this program as described below and outlined in Paragraph 25.a. of the Amended Consent Decree.

3.2.1 Updated Sanitary Sewer Overflow Plan Implementation

MSD prepared and submitted the Updated Sanitary Sewer Overflow Plan (SSOP) on February 10, 2006. This plan included an overview of the MSD sanitary sewer overflow abatement program and specific actions taken to reduce/eliminate overflows from the sanitary sewer system. This document included a list of the proposed improvements to be accomplished by December 31, 2008. Activities required under the Updated SSOP have been completed.

3.2.2 Interim Sanitary Sewer Discharge Plan

MSD submitted for approval an Interim Sanitary Sewer Discharge Plan (ISSDP) on September 30, 2007. Comments were received on January 8, 2008. MSD resubmitted the revised ISSDP on March 7, 2008, and received an approval letter for the ISSDP on July 24, 2008. The approved ISSDP document can be viewed on the MSD Project WIN website www.msdprojectwin.org.

3.2.3 Final Sanitary Sewer Discharge Plan

MSD submitted for approval a Final Sanitary Sewer Discharge Plan (SSDP) on December 19, 2008, as Volume 3 of the Integrated Overflow Abatement Plan (IOAP). The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010.

• Prospect WQTC Elimination Projects Easement Status - A total of 43 easements have been identified which includes 10 easements in Norton Commons area that are





necessary to complete the entire suite of projects related to the plant eliminations. Final design alignments reduced the easement number from the previously reported 49.

 Acquired 25 of these easements. Sixteen easements are still in the design/negotiation phase. MSD will start condemnation of the remaining two easements due to property owners not willing to negotiate.

3.3 CSO Long Term Control Plan

The CSO Long Term Control Plan (LTCP) addresses the overflows and unauthorized discharges from the CSS. Two separate plans have been submitted under this program as described below and outlined in Paragraph 25.b. of the Amended Consent Decree.

3.3.1 Interim CSO Long Term Control Plan

The Interim CSO LTCP was initially submitted to EPA and KDEP on February 10, 2006. MSD received an approval letter dated February 22, 2007, for the Interim LTCP. The approved Interim LTCP can be viewed on the MSD Project WIN website <u>www.msdprojectwin.org</u>.

This plan includes an overview of the MSD program, efforts taken to reduce/eliminate discharges from the CSS and the list of proposed improvements to be accomplished by December 31, 2008. All projects associated with this plan have been completed.

3.3.2 Final CSO Long Term Control Plan

MSD submitted for approval the Final CSO LTCP on December 19, 2008, as Volume 2 of the Integrated Overflow Abatement Plan (IOAP). The IOAP was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010.

3.3.3 Green Program Update

MSD continued program activities to provide incentives to private property owners to reduce the amount of impervious surface that drains to the combined sewer system. This program is outlined in the brochure at the following link: <u>http://www.msdlouky.org/pdfs/Green Infrastructure Incentives Savings Weba.pdf</u>

An internal training session was delivered on August 20, 2012, outlining green infrastructure program details. Topics included sample projects, green program elements, maintenance, tracking, and inspection of green infrastructure projects.

A green infrastructure tracking mechanism in the HANSEN system was utilized during the reporting period. HANSEN allows for scheduling of construction inspections, follow-up for correction of issues, and on-going long term inspections as required by the MS4 permit. Training on this system was facilitated in August 2012.





3.4 Activity Progress Chart

A Gantt chart showing the previous and Proposed IOAP Modification schedules (Refer to IOAP, Volume 1 – Figure 6.3.1 for the previous) for the entire program is provided below.





ity Name	Scheduled 2009 IOAP	2012 IOAP	2009 2010 2011 2012 2013 2014 2015 2018 2017
	Finish Completion 31-Dec-24_31-Dec-24	Modification 31-Dec-24	
ONG TERM CONTROL PLAN	01-Jan-21_31-Dec-20	31-Deo-20	
GREEN DEMONSTRATION PROJECTS	31-Dec-20 31-Dec-20	31-Dec-20	
GREEN INFRASTRUCTURE DEMONSTRATION PROJECTS	31-Deo-11 A 31-Deo-11	31-Dec-11	
GREEN INFRASTRUCTURE DEMONSTRATION PROJE(31-Dec-11 A 31-Dec-11	31-Dec-11	
GREEN INFRASTRUCTURE PROGRAM	31-Dec-20 31-Dec-20	31-Deo-20	
GREEN INFRASTRUCTURE PROGRAM	31-De0-20 31-De0-20	31-Dec-20	
GRAY INFRASTRUCTURE PROJECTS	31-Dec-12 31-Dec-12	31-Dec-12	
CS0 123 DOWNSPOUT DISCONNECTION	31-Dec-12 31-Dec-12	31-Deo-12	
1-84 AND GRINSTEAD DRIVE STORAGE BASIN	31-Dec-20 21-Dec-14	31-Deo-20	
I-64 AND GRINSTEAD DRIVE STORAGE BASIN	31-Dec-20 21-Dec-14	31-Dec-20	
CSO 140 INCREASE PIPE CONVEYANCE	31-Dec-15 31-Dec-15 31-Dec-15 31-Dec-15	31-Dec-15	
CSO 208 SEWER SEPARATION	30-Dec-13 31-Dec-13	30-Dec-13	
CSO 205 SEWER SEPARATION	30-Deo-13 31-Deo-13	30-Deo-13	
CLIFTON HEIGHTS STORAGE BASIN	31-Dec-18 31-Dec-18	31-Dec-18	
CLIFTON HEIGHTS STORAGE BASIN PADOVA PLIN WET WEATHER TREATMENT FACILITY AND OFFICIES I	31-Dec-16 31-Dec-16	31-Dec-16	
PADDY'S RUN WET WEATHER TREATMENT FACILITY	31-Deo-16 31-Deo-14	31-Dec-16	
PORTLAND WHARF STORAGE BASIN	31-Deo-19 31-Deo-19	31-Deo-19	
PORTLAND WHARF STORAGE BASIN	31-Dec-19 31-Dec-19	31-Deo-19	
STORY AVENUE AND MAIN STREET STORAGE BASIN	31-Dec-20 31-Dec-13 31-Dec-20 31-Dec-13	31-De0-20 31-De0-20	
CS0 068 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTROL	31-Deo-14 31-Deo-14	31-Deo-14	
CSO 058 IN-LINE STORAGE AND GREEN INFRASTRUCTURE CONTROLS	31-Deo-14 31-Deo-14	31-Deo-14	
SOUTHWESTERN PARKWAY STORAGE BASIN	31-Dec-18 31-Dec-18 31-Dec-18 31-Dec-18	31-Dec-18 31-Dec-18	
13TH STREET AND ROWAN STREET STORAGE BASIN	01-Jap-21 31-Dec-20	31-Dec-20	
13TH STREET AND ROWAN STREET STORAGE BASIN	31-Dec-20 31-Dec-20		
13TH STREET AND ROWAN STREET STORAGE BASIN	31-Dec-20	31-Dec-20	
CENTRAL RELIEF DRAW IN UNE STORAGE, GREEN INFRASTRUCTURE AND DISTRIBUTED STORAGE	01-Jan-21	31-Dec-18	
CENTRAL RELIEF DRAIN IN-LINE STORAGE, GREEN INFRASTRUCTURE AND DISTRIBUTED STORAGE	01-Jan-21	31-Dec-18	
CSO 160 IN-LINE STORAGE AND GREEN INFRASTRUCTORE CONTRO CSO 160 IN-LINE STORAGE AND GREEN	31-Dec-15 31-Dec-15 31-Dec-15 31-Dec-15	31-Dec-15 31-Dec-15	
INFRASTRUCTURE CONTROLS			
ADAMS STREET SEWER SEPARATION	31-Deo-12 31-Deo-12	31-Dec-12	
ADAMS STREET SEWER SEPARATION	31-Dec-12 31-Dec-12	31-Dec-12	
18TH AND NORTHWESTERN PKY STORAGE BASIN	31-Dec-17 31-Dec-17 31-Dec-17 31-Dec-17	31-Dec-17 31-Dec-17	
ALGONQUIN PARKWAY STORAGE BASIN	01-Jan-19 31-Dec-18	31-Dec-18	
ALGONQUIN PARKWAY STORAGE BASIN	31-Dec-18 31-Dec-18		
SOUTHERN OUTFALLINUM STORAGE AT ABOUST	31-Dec-18 31-Dec-18	31-Dec-18 31-Dec-18	
SOUTHERN OUTFALL IN LINE RETIRTION (SOR 2)	01-Jan-19	31-Dec-18	
SOUTHERN OUTFALL IN-LINE RETENTION AT 13TH AND WILSON AVE. (SOR 2)	01-Jan-19	31-Dec-18	
NIGHTINGALE PUMP STATION REPLACEMENT AND STORAGE	31-Deo-15 31-Deo-16 31-Deo-15 31-Deo-16	31-De0-15	
LEXINGTON ROAD AND PAYNE STREET STORAGE BASIN	31-Dec-20 31-Dec-20	31-Deo-20	
LEXINGTON ROAD AND PAYNE STREET STORAGE BAS	31-Dec-20 31-Dec-20	31-Dec-20	
LOGAN STREET AND BRECKENRIDGE ST STORAGE BASIN	31-Dec-17 31-Dec-17 31-Dec-17 31-Dec-17	31-Dec-17 31-Dec-17	
CSO 085 STRUCTURAL MODIFICATIONS AND GREEN INFRASTRUCTU	31-Deo-15 31-Deo-15	31-Deo-15	
CSO 093 STRUCTURAL MODIFICATIONS AND GREEN INFRASTRUCTURE CONTROLS	31-Deo-15 31-Deo-15	31-Dec-15	
CSO 108 DAM MODIFICATIONS	31-Dec-10 A 31-Dec-10 31-Dec-10 A 31-Dec-10	31-Dec-10 31-Dec-10	
STORY AVENUE AND SPRING STREET GREEN INFRASTRUCTURE CC	31-Deo-16 31-Deo-16	31-Dec-16	
STORY AVENUE AND SPRING STREET GREEN INFRASTRUCTURE CONTROLS	31-Dec-16 31-Dec-16	31-Deo-16	
FLOOD PUMP STATION PROJECTS	31-Dec-14 31-Dec-14	31-Deo-14	
27TH STREET FLOOD PUMP STATION	30-Jun-13 30-Jun-13	30-Jun-13	
2010 STREET FLOOD PUMP STATION	SU-SUF13 SU-JUN-13	SU-JUN-13	



Date Date: 01-Jul-12



	Finish Completion	Modification	
4TH STREET FLOOD PUMP STATION 3	31-Dec-12 31-Dec-12	31-Dec-12	
34TH STREET FLOOD PUMP STATION 3	1-Dec-12 31-Dec-12	31-Dec-12	
4TH STREET FLOOD PUMP STATION 3	1-Dec-12 31-Dec-12	31-Dec-12	
HAWNEE FLOOD PUMP STATION	30-Jun-13 30-Jun-13	30-Jun-13	
SHAWNEE FLOOD PUMP STATION 3	30-Jun-13 30-Jun-13	30-Jun-13	
17TH STREET FLOOD PUMP STATION 3	31-Deo-14 31-Deo-14	31-Dec-14	
17TH STREET FLOOD PUMP STATION 3	31-Dec-14 31-Dec-14	31-Dec-14	
IITARY SEWER DISCHARGE PLAN 3	31-Deo-24 31-Deo-24	31-Deo-24	
ARGRASS CREEK MIDDLE FORK AREA 3	31-Deo-24 31-Deo-24	31-De0-24	
300SE CREEK PUMP STATION 3	1-Dec-24 31-Dec-24	31-Deo-24	
GOOSE CREEK POINTP STATION 3	1-Dec-24 51-Dec-24	31-Dec-24	
GOOSE CREEK PS PH1 - DEVONDALE PS WW STOR/ 3	1-Dec-24	31-Dec-24	
GOOSE CIK PS PH2 - PS & WET WATHER STORAGE 3	1-Deo-24	31-Deo-24	
GOUSE CRK PS PH2 - PS & WET WEATHER STORAGE 3	01-De0-24	31-De0-24	
ANCHOR ESTATES-ANCHOR ESTS PS 1 & 2 PS ELIMINATIONS 3 ANCHOR ESTATES-ANCHOR ESTS PS 1 & 2 PS 3	1-Dec-16 31-Dec-16	31-Dec-16 31-Dec-16	
ELIMINATIONS		0100010	
ANCHOR ESTATES- VANNAH PS ELIMINATION 15	-Oct-11 A 31-Dec-13	31-Dec-13	
ANCHOR ESTATES- VANNAH PS ELIMINATION 15	-Oct-11 A 31-Dec-13	31-Deo-13	
IURSTBOURNE ISI INVESTIGATION & REHABILITATION 274	Dec-11 A 31-Dec-11	31-Dec-11	
HURSTBOURNE I&I INVESTIGATION & REHABILITATION 27-	Dec-11 A 31-Dec-11	31-Deo-11	
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AN 3 MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER 3	1-Dec-13 31-Dec-13	31-Dec-13	
STORAGE, AND UMFLS DIVERSION 1 - BUECHEL BASIN	-Decrip 31-Decrip	31-080-13	
MDDLE FORK RELIEF INTERCEPTOR, WET WEATHER STORAGE, AN 3	1-Deo-23 31-Deo-23	31-Deo-23	
MIDDLE FORK RELIEF INTERCEPTOR, WET WEATHER 3	1-Dec-23 31-Dec-23	31-Deo-23	
STORAGE, AND UMFLS DIVERSION 2 PS & WET			
DAR CREEK AREA 3	1-Dec-24 31-Dec-24	31-Deo-24	
ITTLE CEDAR CREEK INTRECEPTOR IMPROVEMENTS 3	1-Dec-24 31-Dec-24	31-Dec-24	
LITTLE CEDAR CREEK INTRECEPTOR IMPROVEMENTS 3	1-Dec-24 31-Dec-24	31-Dec-24	
IDLEWOOD INLINE STORAGE 3	1-Dec-23 31-Dec-23	31-Dec-23	
SARDSTOWN RD PS IMPROVEMENTS 3	31-Dec-21 31-Dec-21	31-Dec-21	
BARDSTOWN RD PS IMPROVEMENTS 3	1-Dec-21 31-Dec-21	31-Dec-21	
RUNNING FOX PS ELIMINATION 05-	-Apr-10 A 31-Dec-10	31-Dec-10	
RUNNING FOX PS ELIMINATION 05-	-Apr-10 A 31-Dec-10	31-Dec-10	
ARMOUNT RD PS IMPROVMENTS (01-Jan-15 31-Dec-23	31-Dec-23	
FARMOUNT RD PS IMPROVEMENTS 24	-Apr-12 A	31-Dec-23	
FAIRMOUNT RD PS IMPROVEMENTS 24	-Apr-12 A	31-Deo-23	
FARMOUNT RD PS IMPROVEMENT PH 2	01-Jan-15	31-Dec-15	
PAIRMOUNT STORAGE BASIN	U1-Jan-15	31-Dec-15	
AND INCO SEWER STSTEM AREA 3	1-De0-23 31-De0-23	31-De0-23	
HAZELWOOD PS I&I INVESTIGATION & REHABILITATIO 30	FJURF11 A. 30-JURF11 FJURF11 A. 30-JURF11	30-Jun-11 30-Jun-11	
SONNE PUMP STATION ISI INVESTIGATION & REHABILITATION 30	Sun-11 A 30-Jun-11	30-Jun-11	
SONNE PUMP STATION I&I INVESTIGATION & 30	-Jun-11 A 30-Jun-11	30-Jun-11	
REHABILITATION			
CAMP TAYLOR SSES 05	8-Jul-11 A 31-Dec-11	31-Deo-13	
CAMP TAYLOR SSES 08	8-Jul-11 A 31-Dec-11	31-Deo-13	
CAMP TAYLOR SANITARY SEWER #14 3	1-Dec-12 31-Dec-13	31-Dec-13	
CAMP TAYLOR SANITARY SEWER #18 3	1-Dec-12 31-Dec-13	31-Dec-13	
CAMP TAYLOR SANITARY SEWER #18 3	1-Dec-13 31-Dec-13	31-Deo-13	
CAMP TAYLOR SANITARY SEWER #2 3	31-Dec-13 31-Dec-13	31-Dec-13	
CAMP TAYLOR SANITARY SEWER #2 3	1-Dec-13 31-Dec-13	31-Deo-13	
CAMP TAYLOR #3- SEWER REHABILITATION 3	31-Dec-17 31-Dec-17	31-Deo-17	
CAMP TAYLOR #3- SEWER REHABILITATION 3	31-Dec-17 31-Dec-17	31-Dec-17	
CAMP TAYLOR #4-SEWER REHABILITATION & REPLACEMENT 3	1-Dec-23 31-Dec-23	31-Dec-23 31-Dec-23	
OVINE TO LEAD THE ADDITION OF A REPORT OF A	-Apr-10 A 31-Dec-21	01-Apr-10	-
NOODLAND HILL PS DIVERSION	Apr.10 A 30 Jun 11	01-Apr-10	
WOODLAND HILL PS DIVERSION 01-	-Apr-10 A 30-Jun-11	01-Apr-10	
ASHBURTON PS IMPROVEMENTS AND DIVERSION 22-	Jan-10 A 31-Dec-21	22-Jan-10	
	Inc 10 A 21 Dec 21	22, Jpp, 10	



9 3 Q4	2020 Q1 Q2 Q3 Q4	2021 Q1 Q2 Q3 Q4	2022 Q1 Q2 Q3 Q4	2023 Q1 Q2 Q3 Q4	2024 Q1 Q2 Q3 Q4	
			-			
•			-			
				Date Dat	e: 01-Jul-12	



	N	ASD Integ	rated Overflow Abatem	ent Plan Im	plementa	tion Schedule	e (01 Jan 20	09-31 Dec 2024)			
ity Name	Scheduled 2009 IOAP	2012 IOAP	2009 2010 201	2012	2013	2014 2015	2018	2017 2018	2019 2020	2021 2022	2023 2024
HITE CREEK AREA	31-Deo-24 31-Deo-24	31-Dec-24		sland lastasland	an az as an an			010203040102030401			
MEADOW STREAM PS AND FORCE MAIN	31-Dep-12 31-Dep-16	31-Dec-16									
MEADOW STREAM PS AND FORCE MAIN	31-Dec-12 31-Dec-16	31-Dec-16			12			R.			
KAVANAUGH RD PS IMPROVEMENTS	31-Deo-24 31-Deo-24	31-Dec-24								-9.	
KAVANAUGH RD PS IMPROVEMENTS	31-Dec-24 31-Dec-24	31-Deo-24									
FLOYDSBURG RD SSES, REHAB AND PUMP STATION UPGRADE	17-Dec-10 A 31-Dec-10	31-Dec-10									
UPGRADE	17-Dec-10 A 31-Dec-10	31-Deo-10	1								
	27.Moil.12.27.Moil.12	27.Mou.12									
19 STD DEECLANCED VILLAGE SANITARY SEWED DEDLACEMENT	20 Cos 10 4 27 Apr 11	27.405.11									
ISSDP BEECHWOOD VILLAGE SANITARY SEWER REPLACEMENT	29-Sep-10 A 27-Apr-11	27-50-11									
BEECHWOOD VELAGE SANDARY SEWER REPLACEMENT (WEST)	29-Sec-10.4	27-Anr-11									
BEECHWOOD VILLAGE SANITARY SEWER REPLACE	29-Sep-10 A	27-Apr-11									
INCOMPOSITIVE SANTAY SWIT REPARTMENT (ART)	29-Seo-10 A	27-Apr-11									
BEECHWOOD VILLAGE SANITARY SEWER REPLACED	29-Sep-10 A	27-Apr-11									
SINUMO FORK RELIEF SEWER	23-Deo-09 A 30-Deo-10	23-Dec-09									
SINKING FORK RELIEF SEWER	25-De0-09 A 30-De0-10	23-De0-09									
ISSOP DEREK R GUTHRIE WATER QUALITY TREATMENT CENTER	30-Jul-12 31-Deo-11	31-00-12									
DIREX & SUTHER WORK WIT WEATHIR TRACIMENT INCLUTY	20-May-12 A	31-Oct-12									
TREATMENT FACILITY	20-May-12 A	31-Oct-12									
WCWTP: WW FLOW EQU & TMT	30-Sep-12	31-Oct-12									
DRIWOT: BUWER MICHAEL	03-Mar-11 A	31-Oct-12									
DRGWQTC: BLOWER PACKAGE	03-Mar-11 A	31-Oct-12									
DRUMORC: WET WEATHER DOLALEATION BASIN	31-Jul-12	31-Oct-12		1000							
DRGWQTC: WET WEATHER EQUALIZATION BASIN	31-Jul-12	31-Oct-12									
18 SDP HIKES LANE INTERCEPTOR HIGHGATE SPRINGS PS	27-Nov-12 27-Nov-12	27-Nov-12									
ISSUP HIKES LANE INTERCEPTOR HIGHGATE SPRINC	30-010-12 27-N0y-12										
HIS FORT WEREPOR	30-Nov-11 A	27-Nov-12 27-Nov-12									
	JUNIOPTIA	21-1404-12									
HIKES POINT INTERCEPTOR PHASE 2	27-Nov-12 27-Nov-12	27-Nov-12									
CARSON & RUBBLE RELIEF	20-Nov-09 A	27-Nov-12									
CARSON & RIBBLE RELIEF	20-Nov-09 A	27-Nov-12									
HIGS FORT MEAN AFORT	31-Oct-12	27-Nov-12									
HIKES POINT RELIEF EFFORT	31-0d-12	27-Nov-12									
ISSOP NORTHERN DITCH DIVERSION INTERCEPTOR ISSOP NORTHERN DITCH DIVERSION INTERCEPTOR	16-Feb-11 A 31-Jul-11 16-Feb-11 A 31-Jul-11	31-Jul-11	· · · · · ·								
NORTHERN DITCH DIVERSION INTERCEPTOR	16-Feb-11 A	31-JUI-11									
NORTHERN DITCH DIVERSION INTERCEPTOR	15 Eab 11 A	31-30-11 31 bit 11									
NORTHERN DITCH DIVERSION INTERCEPTOR PH 2	16-Feb-11 A	31-Jul-11									
ISSOP SOUTHEAST DIVERSION STRUCTURE & INTERCEPTOR	30-Sep-12 27-Nov-12	30-Sep-12									
ISSDP SOUTHEAST DIVERSION STRUCTURE & INTER-	28-Sep-12 27-Nov-12										
SOUTHIGAST DIVERSION STRUCTURE & INTRICEPTOR	12-May-12 A	12-May-12									
SOUTHEAST DIVERSION STRUCTURE & INTERCEPT	12-May-12 A	12-May-12									
SOUTHAST DIVERSIST STUCTURE & WIRKOPOX Pre-3 SOUTHEAST DIVERSION STRUCTURE & INTERCEPTOR Phase 2	30-Sep-12 30-Sep-12	30-Sep-12 30-Sep-12									
FEFERSONTOWN AREA	31-Dec-22 31-Dec-22	31-Dec-22									
JEFFERSONTOWN WOTO ELIMINATION	01. Inc. 16 21 Des 45	31.000.15									
JEFFERSONTOWN WOTC FLIMINATION	31-Dec-15 31-Dec-15	31-De0-15	and the second se								
AFFERENTOWN WORL BUMINION	31-Dec-15	31-Dec-15					10				
JEFFERSONTOWN WOTC ELIMINATION	31-Dec-15	31-Dec-15					-				
AFFEISONTOWN FORCE MAIN	31-Deo-15	31-Deo-15									
JEFFERSONTOWN FORCE MAIN	31-Dec-15	31-Dec-15									
GRAND AVENUE DUMD STATION	31-Dec-15 31-Dec-15	31-Dec-15									
UPPE BLOOK IN NURSEFOR	31-Dec-15	31-Dec-15									
UPPER BILLTOWN RD INTERCEPTOR	31-Deo-15	31-Dec-15									
BALTOWN RD INTERCEPTOR 55	01-Jan-16	31-Dec-15									
BILLTOWN RD INTERCEPTOR SS	01-Jan-16	31-Dec-15									
BUDWN KOM, IM & MT	31-Dec-12	31-Dec-12	-		ŝ						
CHENOWETH HILLS WOTC FLIMINATION & PA IMPROVEMENTS	31-Dec 15-21 Dec 15	31-Dec-12									
	31-De0-15/31-De0-15	31-080-15	-								
Approved 2009 IOAP Remaining Work	rk			3) of 5						Date Date: 01-Ju





mame	Finish Completion	Modification	21/02/03/04/01/02
CHENOWETH HILLS WOTC ELIMINATION & PS ELIMINA	31-Deo-15 31-Deo-15	31-Deo-15	
DELL RD & CHARLANE PKWY INTERCEPTOR IMPROVEMENT8	31-Dec-22 31-Dec-22	31-Dec-22	
DELL RD & CHARLANE PKWY INTERCEPTOR IMPROVE	31-Dec-22 31-Dec-22	31-Dec-22	
RAINTREE & MARIAN CT PH1 - P8 ELIMINATION	31-Deo-21 31-Deo-21	31-Deo-21	
RAINTREE & MARIAN CT PH1 - PS ELIMINATION	31-Dec-21 31-Dec-21	31-Deo-21	
RAINTREE & MARIAN CT PS ELIMINATION BAINTREE & MARIAN CT DS ELIMINATION	31-Dec-21 31-Dec-21	31-Dec-21	
MONTREE & MARIAN OF PS ELIMINATION	31-De0-21 31-De0-21	31-Dec-21	
MONTICELLO PS ELIMINATION	31-Dec-22 31-Dec-22	31-Dec-22	
KLONDIKE INTERCEPTOR	31-Dec-15 31-Dec-15	31-Dec-15	
KLONDIKE INTERCEPTOR	31-Dec-15 31-Dec-15	31-Dec-15	
MILL CREEK AREA	13-Apr-12 A 31-Dec-21	31-Deo-21	
SHIVELY INTERCEPTOR	13-Apr-12 A 31-Dec-14	31-Dec-14	
SHIVELY INTERCEPTOR	13-Apr-12 A 31-Dec-14	31-Dec-14	
EAST ROCKFORD LANE PS RELOCATION	30-Mar-12 A 31-Dec-21	31-Dec-21	
EAST ROCKFORD LANE PS RELOCATION	30-Mar-12 A 31-Dec-21	31-Dec-21	
DHIO RIVER FORCE MAIN AREA	31-Dec-24 31-Dec-24	31-Dec-24	
MELLWOOD SYS 1 - MELLWOOD PS & FORCE MAIN	31-Dec-12 31-Dec-12	31-Dec-12	
MELLWOOD SYS 1 - MELLWOOD PS & FORCE MAIN	31-Deo-12 31-Deo-12	31-Dec-12	
MELLWOOD \$Y\$ 2 - WINTON & MOCKINGBIRD P\$ ELIM & PIPE UPOF	31-Dec-24 31-Dec-24	31-Dec-24	
MELLWOOD SYS 2 - WINTON & MOCKINGBIRD PS ELIM & PIPE UPGRADES	31-Deo-24 31-Deo-24	31-Deo-24	
DERINGTON CT P2 // INVESTIGATION 2 DEVIADIL TATION	20 Mar 10 A 24 Mar 10	21 Mar 10	
DERINGTON CT PS // INVESTIGATION & REHABILITATI	30-Mar-12 A 31-Mar-12	31-Mar-12	
PROSPECT WOTC ELIMINATIONS	31-Dec-15 31-Dec-15	31-Dec-15	
PROSPECT WOTC FLIMINATIONS	31-Dec-15 31-Dec-15	31-060-13	
HARROD'S CRIEK PS & FM	31-Dep-15	31-Dec-15	
HARRODS CREEK PS & FM	31-Deo-15	31-Deo-15	
HARRODS CREDK INT	31-Deo-15	31-Deo-15	
HARRODS CREEK INT	31-Dec-15	31-Dec-15	
HARRODS CREEK INT PH 2	31-Dec-15 31-Dec-15	31-Dec-15 31-Dec-15	
RIVER ROAD INT	31-Dec-15	31-Dec-15	
RIVER ROAD INT	31-Deo-15	31-Deo-15	
TIMBERLAKE & HUNTING CREEK S WORK BUM	31-Deo-15	31-Deo-15	
TIMBERLAKE & HUNTING CREEK S WQTC ELIM	31-Deo-15	31-Dec-15	
KEN CARLA WOTC FUM	31-Dec-15 31-Dec-15	31-Dec-15 31-Dec-15	
HARRODS CREEK INT PH 3	31-Dec-15	31-Dec-15	
HARRODS CREEK INT PH 3	31-Dec-15	31-Dec-15	
SHADOW WOOD WWTP ELM	31-Dec-15	31-Dec-15	
SHADOW WOOD WWTP ELIM	31-Deo-15	31-Dec-15	
	31-Dec-15	31-Dec-15	
PROSPECT #3- ORFM SYSTEM IMPROVEMENTS	31-Dec-15 31-Dec-15	31-Dec-15	
PROSPECT #3 - ORFM SYSTEM IMPROVEMENTS	31-Dec-16 31-Dec-16	31-Dec-16	
THER PROJECTS	30-Dec-24 31-Dec-24	30-Deo-24	
CPE/CCP MODIFICATIONS TO WOTC	19-Dec-11 A 31-Dec-11	31-Dec-11	
CPE/CCP MODIFICATIONS TO WQTC	19-Dec-11 A 31-Dec-11	31-Dec-11	
I/ REDUCTION PROGRAM	30-Dec-24 31-Dec-24	30-Dec-24	
I/I REDUCTION PROGRAM	30-Dec-24 31-Dec-24	30-Dec-24	
POND CREEK AREA	31-Dec-24 31-Dec-24	31-Dec-24	1
LEE ANN WAY PUMP STATION IMPROVEMENTS	31-Deo-21 31-Deo-15	31-Dec-15	
LEE ANN WAY PUMP STATION IMPROVEMENTS	31-Deo-14 31-Deo-15		
LEA ANN WAY SANDARY SEWER (/) REHAB	31-Deo-21	31-Deo-15	
LEAANN WAY SANITARY SEWER II REHAB	31-De0-21	31-De0-15	
LEF ANN WAY DS SYSTEM SSES	30-Mar-11 A 30-Mar-11 A	31-Dec-15 31-Dec-15	
	21 Dec 11 A	31 Dec 45	
LEE ANN WAY PH 2 ICA	31-Dec-11 A	31-Dec-15	
LEE ANN WAY SSR PH 1	31-Dec-14	31-Dec-15	
LEE ANN WAY SSR PH 1	31-Dec-14	31-Dec-15	
LEE ANN WAY SSR PH 2	01-Jan-15	31-Dec-15	
LEE ANN WAY SSR PH 2	01-Jan-15	31-Deo-15	
LE ANN WAY INTERPOEDTOR 1/1 REVAR	31-Dec-13	31-Dec-15	
OUTER LOOP & CAVEN AREAPIPE UPGRADES	31-Dec-16-21-Dec-16	31-Dec-15	
OUTER LOOP & CAVEN AREA PIPE UPGRADES	31-Dec-16 31-Dec-16	31-Dec-24	



2020 2021 2022 2023 2024 24 01 02 03 04 0 1 02 03 04 0 1 02 03 04 0 1 02 03 04 0 1 02 03 04 0 1 02 03 04 0 1 02 03 04 0 1 02 03 04 0	
Date Date: 01-Jul-12	



	N	ISD Integr	ated Ov	erflow A	batemen	t Plan Im	plemen	tation So	hedule (01 Jan 20	09- 31 D	ec 2024))
Activity Name	Scheduled 2009 IOAP Finish Completion	2012 IOAP Modification	2009 Q1 Q2 Q3 Q4	2010	2011 4 Q1 Q2 Q3 Q4	2012 Q1 Q2 Q3 Q4	2013	2014 4 Q1 Q2 Q3 Q4	2015	2016 Q1 Q2 Q3 Q4	2017 Q1 Q2 Q3 Q4	2018	2019 Q1Q2Q3
EDSEL PS IN INVESTIGATION & REHABILITATION EDSEL DS IN INVESTIGATION & REHABILITATION	27-Sep-11 A 30-Sep-11	30-Sep-11											<u> </u>
	31.Dec.23.31.Dec.23	31-Dec-23											
CINDERELLA PS ELIMINATION	31-Deo-23 31-Deo-23	31-Dec-23											
GOVERNMENT CENTER PS ELIMINATION	01-Apr-11 A 31-Dec-24	31-Dec-24											
GOVERNMENT CENTER PS ELIMINATION	01-Apr-11 A 31-Dec-24	31-Deo-24											
AVANTI PS ELIMINATION	28-Jul-09 A 31-Dec-10	31-Dec-10											
AVANTI PS ELIMINATION	28-Jul-09 A 31-Dec-10	31-Deo-10											
CHARLESWOOD INTERCEPTOR EXTENSION	31-Dec-22 31-Dec-22	31-Dec-22											
CHARLESWOOD INTERCEPTOR EXTENSION	31-Dec-22 31-Dec-22	31-Deo-22											
LANTANA PS // INVESTIGATION & REHABILITATION	29-Dec-11 A 31-Dec-11	29-Dec-11											
LANTANA PS I/I INVESTIGATION & REHABILITATION	29-Dec-11 A 31-Dec-11	29-Deo-11											
LEVEN PS ELIMINATION	31-Deo-22 31-Deo-22	31-Deo-22											
LEVEN PS ELIMINATION	31-Deo-22 31-Deo-22	31-Deo-22											
CAVEN AVENUE WW STORAGE	31-Deo-24 31-Deo-24	31-Deo-24											
CAVEN AVENUE PS ELIMINATION	31-Deo-24 31-Deo-24	31-Deo-24											
SMALL WWTP AREA	31-De0-21 31-De0-21	31-De0-21											
RIDING RIDGE PS IMPROVEMENTS	31-Deo-14 31-Deo-14	31-Dec-14							•				
RIDING RIDGE PS IMPROVEMENTS	31-De0-14 31-De0-14	31-De0-14											
LUCAS IN PS INUNE STORAGE	31-Dec-21 31-Dec-21 31-Dec-21 31-Dec-21	31-Dec-21											
AT RENE RD PA INLINE ATORAGE	31-Dec-21 31-Dec-21	31-Dec-21											
ST. RENE RD PS INLINE STORAGE	31-Deo-21 31-Deo-21	31-Deo-21											
LAKE FOREST PS IMPROVEMENTS	31-Deo-12 31-Deo-12	31-Deo-12											
LAKE FOREST PS IMPROVEMENTS	31-Deo-12 31-Deo-12	31-Deo-12											
GUNPOWDER PS INLINE STORAGE	31-Deo-21 31-Deo-21	31-Deo-21											
GUNPOWDER PS INLINE STORAGE	31-Deo-21 31-Deo-21	31-Dec-21											
FOX HARBOR INLINE STORAGE	31-Deo-21 31-Deo-21	31-Deo-21											
FOX HARBOR INLINE STORAGE	31-Deo-21 31-Deo-21	31-Deo-21											
FARWAY VIEW PS IMPROVEMENTS	31-Dec-14 31-Dec-14	31-Dec-14							-				
PAIRWAT VIEW PS IMPROVEMENTS	31-Dec-14 31-Dec-14	31-Dec-14							•				
SOUTHEASTERN DIVERSION AREA	31-De0-23 31-De0-23	31-De0-23											
PARAVIEW ESTATES IN INVESTIGATION & REHABILITATION	28-Jun-11 A 30-Jun-11 28- kip 11 A 30- kip 11	30-Jun-11											
SITUED AND INTERCEPTOR	20-Suletti A Su-Suletti	30-50r-11											
SUTHERIAND INTERCEPTOR	31-Dec-23 31-Dec-23	31-Dec-23											
BEARGRASS INTERCEPTOR REHABILITATION PH 2	14-Dep-10 A 31-Dep-10	31-Dec-10											
BEARGRASS INTERCEPTOR REHABILITATION PH 2	14-Dec-10 A 31-Dec-10	31-Dec-10			L.								

Approved 2009 IOAP Remaining Work Completed Work

5 of 5



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		Date Date: 01-Ju	1-12



SECTION 4: Program Activities for Public Outreach, Education, Notification and Participation

4.1 Public Notification Program

MSD produced and distributed a number of products aimed at notifying the community of the objectives of Project WIN and how to lessen the risks associated with coming into contact with sewage overflows.

4.2 **Public Education Programs**

MSD has developed a public education program aimed at disseminating information to the public on MSD's primary business functions with emphasis on wastewater, storm water and flood protection. Efforts continued to utilize various media outlets, including television, radio, magazines, and newspapers to serve as a conduit for circulating information to the public.

During the reporting period, MetroTV aired programs detailing the IOAP Public Input Meetings (with presentations on the IOAP revisions, Camp Taylor Sewer Rehabilitation and Replacement, and the CSO130 Green Infrastructure Project), a rain barrel installation video, and a video on the Paris/Germantown Rain Garden.

4.3 Public Outreach Programs

MSD has developed a public education program aimed at expanding the public's knowledge on MSD's primary business functions of wastewater, storm water and flood protection, with an emphasis on Project WIN Program elements.

4.3.1 IOAP Project and Program Meetings

MSD facilitates meetings for the Wet Weather Team (WWT), and the public to review regulatory commitments, update progress on projects and initiatives, and to gather public input on efforts. During the reporting period, MSD facilitated and planned for the following meetings:

- Facilitated an IOAP meeting to discuss the proposed IOAP 2012 Modification and select project updates. The meeting was held on August 14, 2012, at Camp Taylor Elementary School. MSD discussed IOAP Overview, Camp Taylor Project Updates, and the CSO130 Green Infrastructure Proect.
- Planned a Wet Weather Team meeting to update Stakeholders on the IOAP progress, public input process, and the IOAP 2012 modification in December 4, 2012, at the MSD Main Office at 700 West Liberty Street.
- Planned meetings for early November to discuss proposed IOAP 2012 Modification, review IOAP project locations, and request input on IOAP program and projects.





SECTION 5: Capacity Management Operations and Maintenance Report

Per Paragraph 24.c of the Amended Consent Decree, the Capacity Management Operations and Maintenance (CMOM) Self Assessment Report was submitted to EPA and KDEP on February 10, 2006. MSD received a letter of approval on August 22, 2006. The approved CMOM document can be viewed on the MSD Project WIN website <u>www.msdprojectwin.org</u>.

The primary objectives of CMOM are as follows:

Capacity – Ensuring that adequate wet and dry weather capacity is maintained in existing and new infrastructure

Management – Implementing programs in support of operations and maintenance activities required to ensure KPDES permit compliance and promote public health by remedying design, construction and operational deficiencies; training staff; and performing activities in a safe manner

Operations – Implementing written standard operating procedures to operate system components as designed to meet permit requirements

Maintenance – Implementing systematic, comprehensive asset maintenance and rehabilitation programs to prevent overflows, maximize system reliability and ensure system sustainability

Although the program implementation deadlines from the CMOM Self Assessment Report were previously met, MSD continued to enhance the activities listed below during this reporting period. Highlights of the CMOM program implementation over this reporting period are outlined below.

5.1 Management Programs

M-E-9 Infrastructure Rehabilitation

Activity details are provided in the CMOM schedule provided as **Section 5.4 – CMOM Activity Schedule**.

5.2 **Operations Programs**

<u>O-A-1 Pump Station Operations Programs (Routine Operating Programs)</u> Activity details are provided in the CMOM schedule provided as **Section 5.4 – CMOM Activity Schedule**.

O-A-2 Pump Station Operations Programs (Emergency Operating Programs)

Activity details are provided in the CMOM schedule provided as **Section 5.4 – CMOM Activity Schedule**.

5.3 Comprehensive Performance Evaluations and Composite Correction Plans (CPE/CCP)

Per requirements of MSD's 2009 Amended Consent Decree, MSD implemented a Comprehensive Performance Evaluation (CPE) and Composite Correction Plan (CCP)





program for the District's water quality treatment centers (WQTCs). Although the IOAP CPE assessments defined specific WQTC improvements to be completed by December 31, 2011, MSD will continue to implement CPE/CCP activities as part of the District's CMOM Program. This section will list such activities per WQTC as they occur each reporting period and will be outlined below.

5.3.1 Hite Creek Water Quality Treatment Center

During this reporting period, MSD has put the Facilities Plan Update on hold pending determination if areas beyond the Jefferson County boundary will be included in the future service area. Once confirmed, the alternative analysis for both the collection and treatment systems will be finalized and MSD will begin scheduling public outreach meetings.

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule.**

5.3.2 Floyds Fork Water Quality Treatment Center

Construction of the Phase 2 Expansion of the Floyds Fork WQTC continued in this reporting period with the installation of new influent pumps in the north wet well along with the new waste activated sludge booster station, completion of both tertiary filters and the start up and operation of the three sludge holding tanks and sludge loading pump station. During the next reporting period, work should be completed to place two of the three new clarifiers in service while the installation of the collector mechanisms will be underway in the third clarifier. Work on the outer ring of the oxidation ditch will continue and the influent pumps in the south wet well will be installed. The expansion will provide an average daily design capacity of 7.5 MGD with the addition of the third clarifier at the current site.

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule.**

5.3.3 Derek R. Guthrie Water Quality Treatment Center

During this reporting period, MSD has continued working on the Facilities Plan Update, revisiting the flow and load projections based on recalibration of collection system models. System alternatives and treatment plant rerating were modified to account for the new data. The proposed facility plan update information was made available to the public for review at two IOAP public meetings. During the next reporting period, the alternative analysis will be finalized and public outreach meetings will be scheduled.

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.4 Cedar Creek Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.5 Prospect Area Water Quality Treatment Center Updates

Submitted the elimination plan for the five WQTCs serving Prospect (Timberlake, Hunting Creek North, Hunting Creek South, Ken Carla, and Shadow Wood), to EPA and KDEP on March 31, 2009. Received approval of this plan on September 24, 2009, and work is





proceeding on the projects defined in the IOAP. See **Section 3 – Program Activities for Discharge Abatement Plans** for an update on the design and construction of the projects that make up the elimination plan for the Prospect Area WQTCs.

5.3.5.1 Timberlake Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

Staff completed final design drawings and specifications to install flow pacing equipment to optimize the disinfection process at the plant. The equipment will ensure a constant feed of chlorine (CL2) and sulfur dioxide (SO2) regulated by effluent flow rates. This will reduce operating costs by preventing chemical overdosing and regulating potable water use. The equipment will also include automatic vacuum valves drawing from redundant chemical sources and telemetry notification to ensure the process does not run out of chemicals. During the next reporting period, staff will prioritize sites to advertise for construction.

5.3.5.2 Hunting Creek North Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

Staff completed final design drawings and specifications to install flow pacing equipment to optimize the disinfection process at the plant. The equipment will ensure a constant feed of chlorine (CL2) and sulfur dioxide (SO2) regulated by effluent flow rates. This will reduce operating costs by preventing chemical overdosing and regulating potable water use. The equipment will also include automatic vacuum valves drawing from redundant chemical sources and telemetry notification to ensure the process does not run out of chemicals. During the next reporting period, staff will prioritize sites to advertise for construction.

5.3.5.3 Hunting Creek South Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

Staff completed final design drawings and specifications to install flow pacing equipment to optimize the disinfection process at the plant. The equipment will ensure a constant feed of chlorine (CL2) and sulfur dioxide (SO2) regulated by effluent flow rates. This will reduce operating costs by preventing chemical overdosing and regulating potable water use. The equipment will also include automatic vacuum valves drawing from redundant chemical sources and telemetry notification to ensure the process does not run out of chemicals. During the next reporting period, staff will prioritize sites to advertise for construction.

5.3.5.4 Ken Carla Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

Staff completed final design drawings and specifications to install flow pacing equipment to optimize the disinfection process at the plant. The equipment will ensure a constant feed of chlorine (CL2) and sulfur dioxide (SO2) regulated by effluent flow rates. This will reduce operating costs by preventing chemical overdosing and regulating potable water use. The





equipment will also include automatic vacuum valves drawing from redundant chemical sources and telemetry notification to ensure the process does not run out of chemicals. During the next reporting period, staff will prioritize sites to advertise for construction.

5.3.5.5 Shadow Wood Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

Staff completed final design drawings and specifications to install flow pacing equipment to optimize the disinfection process at the plant. The equipment will ensure a constant feed of chlorine (CL2) and sulfur dioxide (SO2) regulated by effluent flow rates. This will reduce operating costs by preventing chemical overdosing and regulating potable water use. The equipment will also include automatic vacuum valves drawing from redundant chemical sources and telemetry notification to ensure the process does not run out of chemicals. During the next reporting period, staff will prioritize sites to advertise for construction.

5.3.6 Jeffersontown Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

5.3.7 Starview Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

Staff completed final design drawings and specifications to install flow pacing equipment to optimize the disinfection process at the plant. The equipment will ensure a constant feed of chlorine (CL2) and sulfur dioxide (SO2) regulated by effluent flow rates. This will reduce operating costs by preventing chemical overdosing and regulating potable water use. The equipment will also include automatic vacuum valves drawing from redundant chemical sources and telemetry notification to ensure the process does not run out of chemicals. During the next reporting period, staff will prioritize sites to advertise for construction.

5.3.8 Berrytown Water Quality Treatment Center

Schedules for CPE/CCP related capital projects are provided in **Section 5.4 – CMOM Activity Schedule**.

Staff completed final design drawings and specifications to install flow pacing equipment to optimize the disinfection process at the plant. The equipment will ensure a constant feed of chlorine (CL2) and sulfur dioxide (SO2) regulated by effluent flow rates. This will reduce operating costs by preventing chemical overdosing and regulating potable water use. The equipment will also include automatic vacuum valves drawing from redundant chemical sources and telemetry notification to ensure the process does not run out of chemicals. During the next reporting period, staff will prioritize sites to advertise for construction.

5.3.9 Chenoweth Hills Water Quality Treatment Center

CMOM related capital projects will be provided in the schedule provided as **Section 5.4 – CMOM Activity Schedule**.





Staff completed the final program for the operations of the flow pacing equipment to optimize the disinfection process at the plant. During the next reporting period, staff will begin data collection to confirm chemical and potable water savings.

5.3.10 Other Water Quality Treatment Centers

CMOM related capital projects will be provided in the schedule provided as **Section 5.4 – CMOM Activity Schedule**.

- <u>McNeely Lake WQTC</u> MSD has final construction drawings for the gravity elimination of the plant. The plant flows will be diverted to the existing Washington Green Pump Station which will require expansion. The pump station expansion and plant elimination costs are not currently in the approved MSD budget. A developer is proposing to expand this pump station as part of a future development project. If the development does not occur, MSD will review the current budget for funds to eliminate the plant. During the reporting period, MSD continued discussions with the developer to coordinate the plant elimination. During the next reporting period, MSD will also continue discussions with the developer and continue to monitor the structural condition of the plant and perform remedial activities as needed coordinating with the proposed elimination schedule of December 31, 2014.
- <u>Silver Heights WQTC</u> Began design of the gravity solution alternative to eliminate the plant. During the next reporting period, MSD will continue design of the elimination project. While subject to constraints of available budget, easement acquisition, and regulatory agency approval, MSD anticipates elimination will be completed by December 31, 2014.

5.4 CMOM Activity Schedule

CMOM capital project milestones for the period of July 1, 2012, through September 30, 2012, as well as a look-ahead for the period of October 1, 2012, through March 31, 2013, are provided in the schedule below.





			Start State 2012						2012						
,	Activity Name	Start	Finish				2012				2013	1			
		01-Jul-11 A	31-Aug-13	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar			
OM FY ANNU	AL REPORT COMMITMENTS FINAL		00 Aug 10												
-E-9 Infrastruct	ture Rehabilitation	01-Jul-11 A	30-Aug-13												
Lee Ann Way Pum	p Station Grinder Installation Project (F07069)	22-Sep-11 A	22-Sep-12 A												
A2060	Warranty Period	22-Sep-11 A	22-Sep-12 A			:									
Shively Pump Stat	tion Grinder Replacement Project Planning (H10151)	21-Sep-11 A	21-Sep-12 A												
A2150	Warranty	21-Sep-11 A	21-Sep-12 A		:	:									
Fairmount Road P	ump Station Expansion Project (E00303)	24-Apr-12 A	24-Apr-13								i				
A2200	warranty	24-Apr-12 A	24-Apr-13		:	:		!	:		:	:			
Annual I/I Project	(H09205)	01-Nov-11 A	01-Nov-12				_	<u>i</u>							
A2500	Construction	01-NOV-11 A	01-Nov-12		1	1		1							
A4040	Camp Taylor 5 - Construction	10-Feb-12A	01-Nov-12			:		-							
A4030	Camp Taylor 4 - Construction	04-Apr-12A	01-Nov-12			;		1							
A4000	Heller St. Construction	01-Aug-12A	01-Nov-12 01-Sep-12.4			i									
A4570	Macon Rd - Construction	01-Aug-12A	01-Sep-12 A			-									
A4590	Federabush I.n Construction	01-Aug-12A	01-Sep-12.A			3									
A4500	legenousi En - Construction	01-Aug-12A	01-Sep-12.A			4									
A4800	Edgehill Ed., Construction	01-Sep. 12 A	01-Oct-12.6												
Atout	Eugenii Ru - Conselucion	10 Jul 12 A	01-00t-12A												
Ath and Oak OPP	Bid Open	10-Jul-12 A	01-1409-12	•											
A4300	Award	15-000-12.0		•	•										
A4400	Construction	01-Oct-12 A	01-Nov-12		•			4							
St Matthews Jobs	reanter I/I Debabilitation Project (H12050)	01-Feb-12.4	23-400-12					Ť							
A2030	Construction	01-Feb-12A	31-Aug-12 A			<u>.</u>									
A2060	Warranty	23-400-124	23-Aug-12			1		!	!		!	!			
an Ann May Inter	reanter I/I Debabilitation Project (H12054)	15-Feb-12A	30-Sep-12 A								1	1			
A3010	Construction	15-Feb-12 A	30-Sep-12 A		1	1									
lake Forest Sanita	ary Sewer Rehabilitation Project (H11303)	31-Aug-12 A	30-Aug-13				_								
A3160	Ad	31-Aug-12.A				•									
A3170	Bid Opening	25-Sep-12 A				•	•								
A3180	Award	22-Oct-12*					•								
A3190	Construction	01-Nov-12*	30-Aug-13								÷				
Camp Taylor SSB I	Phase I Project (H09407)	31-Mar-12 A	21-Sep-12 A												
A3670	Construction	31-Mar-12 A	21-Sep-12 A		!										
Lea Ann Way SSR	Phase I Project (H09405)	15-Jun-12 A	01-Jan-13												
A3720	Construction	15-Jun-12 A	01-Jan-13		<u> </u>			1	1						
rospect Phase I S	anitary Sewer Rehabilitation Project (H11311)	02-Apr-12A	30-Jul-13												
A3200	Planning	02-Apr-12 A	30-Jul-12 A												
A3210	Ad	01-Oct-12*					•								
A3220	Bid Opening	01-Nov-12*						•							
A3240	Construction	15-Jan-13*	30-Jul-13									<u> </u>			
A3230	Award	15-Jan-13*								•					
Cedar Creek Phase	e II SSES (H11313)	01-Jul-11 A	31-Aug-12 A												
A3120	Planning	01-Jul-11 A	31-Aug-12 A			_									
Chenoweth Hills V	NOTC /Chenoweth Run PS SSES (H11318)	01-Jul-11 A	31-Aug-12 A												
A3130	Planning	01-Jul-11 A	31-Aug-12 A			i						1			
Shively SSES (H11	1408)	01-Jul-11 A	31-Dec-12									1			
A3140	Planning	01-Jul-11 A	31-Dec-12					•	•		1	1			





y ID	Activity Name	Start	Finish			20	012
				Jul	Aug	Sep	Oct
Collins La	ane Sewer Rehabilitation Project (H12106)	14-Jun-12A	11-Dec-12				
A3800	J Construction	14-Jun-12 A	11-Dec-12				
Lea Ann \	Way East - Stonybrook Rehabilitation Project (C08433)	01-Nov-12	13-JUF13				
A3930	J Ad	01-Nov-12*					
A3940	D Bid Open	30-Nov-12*					
A3950	J Award	10-Dec-12*					
A3910	Construction	15-Jan-13"	13-Jul-13				
Lea Ann \	Way East - Fegenbush Rehabilitation Project (CO8433)	24-Sep-12A	30-May-13				
A3980	D Ad	24-Sep-12A				•	
A3990	D Bid Open	16-Oct-12*			1		•
A4000) Award	12-Nov-12*					
A3960	Construction	01-Dec-12*	30-May-13				
Lea Ann V	Way East - Fern Creek Rehabilitation Project (C08433)	31-Jul-12 A	30-Jul-13				
A4180	D Ad	31-Jul-12 A			•		
A4190) Bid Open	28-Aug-12 A			•		
A4200) Award	24-Sep-12 A				•	
A4160	Construction	15-Oct-12*	30-Jul-13				
Lea Ann \	Way East - Picadilly Rehabilitation Project (C08433)	15-Nov-12	14-Aug-13				
A4280	D Ad	15-Nov-12*	-				
A4290) Bid Open	15-Dec-12*					
A4300	Award	15-Jan-13*				1	
A4260	Construction	15-Feb-13"	14-Aug-13				
EV12104	Project	01- Jun-12 A	01- Jun-13				
A4410	Planning Planning	01-100-124	01-Jun 12				_
ATT 10		20-Eeb-12.4	20- Jun-13		1		•
Pump Sta	ition Operations Programs		20-041-10				
O-A-2 Em	nergency Operation Programs	20-Feb-12A	29-Jun-13				
East R	Region Emergency Generator Phase V (H11438)	01-May-12 A	01-May-13				
A22	270 Warranty	01-May-12 A	01-May-13		1		
Centra	al Region Emergency Generator Phase V (H11439)	29-Jun-12 A	29-Jun-13				
A22	280 Warranty	29-Jun-12 A	29-Jun-13				
Trinity	y Homes Pump Station Emergency Generator & Access Road (H11440)	09-Aug-12 A	30-Nov-12				
A20	040 Award	09-Aug-12 A			•		
A20	050 Construction	09-Aug-12 A	30-Nov-12				
Trinity	y Homes Pump Station Roof Hatch (H11440)	01-Aug-12A	20-Mar-13			1	
A46	610 Design	01-Aug-12 A	22-Oct-12				
A46	630 Award	01-Nov-12*					
A46	850 Bid Open	30-Nov-12*				1	
A46	620 Ad	20-Dec-12*					
A46	840 Construction	20-Dec-12*	20-Mar-13				
North	ern Ditch Diversion Structure Flow Meter Manhole Project (H13033)	06-Sep-12A	13-Jan-13				
A46	680 Award	06-Sep-12A				•	
A47	700 Bid Open	21-Sep-12A				•	
A46	670 Ad	15-Oct-12*				•	٠
Δ4P	890 Construction	15-Oct-12	13-Jan-13				•
Morrie	E Forman WWTP Sampling Manholes (H09374)	01.409.124	30-Apr-13			I	
	750 Decim	01-Aug-12A	15-New-12				
A47	700 Award	01-Aug-12A	10-140V-12				
P47	720 Award	01-Dec-12*					
A47	740 Bid Open	02-Jan-13*				i	







/ ID	Activity Name	Start	Finish			20	012
				Jul	Aug	Sep	Oct
A4710	Ad	30-Jan-13*					
A4730	Construction	30-Jan-13*	30-Apr-13				
34th Street F	PS Gate Actuator Replacement Project (H09352)	26-Jul-12 A	15-Nov-12				
A4770	Award	26-Jul-12 A		•			
A4780	Construction	26-Jul-12 A	15-Nov-12		1	1	
Royster Bas	in Access Road Project (H09365)	15-Jul-12 A	17-Nov-12				
A4320	Ad	15-Jul-12 A		•			
A4350	Bid Open	15-Aug-12 A			•		
A4330	Award	18-Sep-12 A				•	
A4340	Construction	18-Sep-12A	17-Nov-12				
Royster Bas	in Generator Project (H09365)	15-Jan-13	11-Jun-13				
A4810	Design	15-Jan-13*	15-Feb-13				
A4820	Ad	22-Feb-13*					
A4850	Bid Open	22-Mar-13*					
A4830	Award	12-Apr-13*					
A4840	Construction	12-Apr-13*	11-Jun-13				
Caven Emer	gency Generator (H11077)	20-Feb-12 A	20-Feb-13				
A2290	Warranty	20-Feb-12 A	20-Feb-13				
Prospect Po	int Pump Station Access Road (H13084)	01-Jun-12 A	10-Mar-13				
A4420	Design	01-Jun-12 A	15-Oct-12		1	1	
A4430	Ad	22-Oct-12*					•
A4440	Bid Open	22-Nov-12*					
A4450	Award	10-Dec-12*					
A4460	Construction	10-Dec-12*	10-Mar-13				
CPE/CPE Treatn	nent Plant Activities	01-Oct-11 A	31-Aug-13				
Hunting Greek S	outh Lagoon Elimination (H11462)	13-Nov-11 A	13-Nov-12				
A2220	Warrantly	13-Nov-11 A	13-Nov-12		i	i	
Timberlake Lag	pon Elimination (H11431)	17-Nov-11 A	16-Nov-12				
A2230	Warranty	17-Nov-11 A	16-Nov-12		i	i	
MFWQTC Secon	dary Clarifier Flow Meter Project (H12046)	16-Apr-12 A	16-May-13				
A3320	Construction	16-Apr-12 A	16-May-13		:	1	
MFWOTC Secon	dary Bypass Flume Replacement (H12047)	21-May-12 A	28-Oct-12				
A3270	Construction	21-May-12 A	28-Oct-12				
CM OM CPE/CCP	PEY11 - CL2 and SO2 Flow Pacing (H09360)	01-Oct-11 A	31-Aug-13				
A3440	Design	01-Oct-11 A	20-Aug-12 A		:		
A3400	Ad	30-Nov-12*	-				
A3410	Bid Opening	15-Dec-12*					
A3430	Award	15-Jan-13*					
A3420	Construction	15-Feb-13*	31-Aug-13				
Hillridge WTP D	iversion Project (A13070)	24-Sep-12 A	30-Nov-12				
A4510	Award	24-Sep-12A				•	

3 of 3







SECTION 6: Project WIN Performance Overview

6.1 Rainfall

The number and the volume of wet weather overflows are directly related to the amount of rain that has fallen during the reporting period. The following graph shows the Jefferson County average rainfall amounts for the last quarter. Data was pulled from MSD's Rain Gauges.



6.2 Collection System Unauthorized Discharges

6.2.1 Collection System Overflows to Waters of the United States (WUS)

Recorded information related to overflows reaching Waters of the United States (WUS) for the reporting period. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. Details of these overflows will be included in the Annual Report for the period of July 1, 2012, through June 30, 2013, and will be posted on the Project WIN website. During this quarter, 19 overflows to the Waters of the United States (WUS) have been reported.





Unauthorized Discharges (Waters of the United States)								
Problem	Dry Weather	Wet Weather	Total					
Blending At Jtown WQTC	0	1	1					
Bypass At WQTC	0	2	2					
Grease Blockage	1	0	1					
Lack of System Capacity	0	9	9					
Mechanical Failure	1	0	1					
Obstruction-Not Grease or Root	1	0	1					
Power Outage (LG&E)	0	2	2					
Roots	0	2	2					
Total	3	16	19					

6.2.2 Overflows to Ground (EXT)

Recorded information related to overflows to the ground that did not reach waters of the United States for the reporting period. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. These overflows will be included in the Annual Report for the period of July 1, 2012, through June 30, 2013.

6.2.3 Overflows to Interior (INT)

Recorded information related to overflows to building interiors for the reporting period. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. These overflows, that are the result of an issue in the main line, will be included in the Annual Report for the period of July 1, 2012, through June 30, 2013.

6.2.4 Dry Weather CSOs

Recorded information related to dry weather overflows from permitted combined sewer overflow outfalls. This information is entered and maintained in Hansen utilizing procedures reviewed and improved through efforts associated with various components of the Amended Consent Decree. A detailed report of these overflows will be included in the Annual Report for the period of July 1, 2012, through June 30, 2013. The table below summarizes dry weather CSOs that occurred during the quarter. Appendix A-1 includes details on the dry weather overflows that occurred in the quarter.

	Dry Weather CSO - July 1, 2012 - September 30, 2012										
cso	Type of Discharge	Date/Time Problem		Cause	Volume (Gal)						
CSO148	DISDW	9/12/12 1:25 PM	OBSTRUCTION- NOT GREASE OR ROOT	BLOCKAGE IN LINE UPSTREAM OF SIPHON AND DOWNSTREAM OF CSO	180 GAL						






6.3 CSO Reductions

Included in **Appendix B** is the CSO data for this quarter. A summary of any data anomalies and the CSO data for each monitored overflow has been graphed along with rainfall information from the nearest rain gauge to facilitate review of the overflows that occurred.

• There were no CSO reduction projects completed during the reporting period.

6.4 SSO Reductions

Estimation of SSO volume is not available in the same manner as it is for the CSO locations. The SSO volume reductions are estimates based on actual observations or from flow monitoring information.

• There were no SSO reduction projects completed during the reporting period.

6.5 Gravity Line Preventive Maintenance

Each quarter, data and statistics relating to the cleaning, inspection, and maintenance of sewer assets performed under the Gravity Line Preventive Maintenance (GLPM) are reported. The following data was compiled for the period of October 1, 2011, through September 30, 2012. The first table includes data and targets. The second table includes unplanned maintenance and other maintenance activities that are performed in response to inspection.





Rolling Quarterly GLPM Performance With Targets												
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Target/ qtr	% of Annual Target	Total					
Combined Sewer Area												
Catch Basins Cleaned CSO Area - Planned Maintenance	7,570	8,479	6,261	5,439	4,460	30%	27,749					
CSO Inspections	1,339	1,334	1,321	918	1,272	18%	4,912					
Sanitary Sewer Area												
Catch Basins Cleaned SSO Area - Planned Maintenance	847	2,181	1,987	86	1,144	2%	5,101					
County Wide												
Sewer Main Inspections MSD Crews (LF)	202,842	228,679	179,018	167,171	198,000	21%	777,710					
Sewer Main Inspections Contractor (LF)	216,282	101,456	545,877	0	198,000	0%	863,615					
Total Inspections (LF)	419,124	330,135	724,895	167,171	396,000	11%	1,641,325					

Rolling Quar	rterly GLPN	l Performan	се		
	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Total
Combined Sewer Area					
Catch Basins Cleaned CSO Area - Unplanned Maintenance	168	206	375	308	1,057
CSO Debris Removal Work Order	103	129	121	101	454
Chemical Root Treatment CSO Area (LF)	961	1,887	0	0	2,848
Root Cutting CSO Area (LF)	41,348	41,279	36,496	2,920	122,043
Flushing and Cleaning of Sewer Mains CSO Area (LF)	15,388	12,920	10,190	11,319	49,817
Sanitary Sewer Area					
Catch Basins Cleaned SSO Area - Unplanned Maintenance	115	51	93	32	291
Chemical Root Treatment SSO Area (LF)	120,630	114,326	2,853	0	237,809
Root Cutting SSO Area (LF)	43,603	37,836	40,751	220	122,410
Flushing and Cleaning of Sewer Mains SSO Area (LF)	34,710	23,981	31,346	3,852	93,889

Rolling quarterly GLPM performance is related to unplanned maintenance; therefore no targets have been developed.

6.6 Water Quality Treatment Center Bypasses

6.6.1 Bypass Events

Included in **Appendix A-2** is a report that lists the details of the two bypasses that occurred at water quality treatment centers (WQTC) during this reporting period. Bypasses were reported for the following WQTCs:





Bypass Events - July 1, 2012 - September 30, 2012											
Type of Bypass	Date	D	Facility Name								
Wet Weather	9/8/12	MSD0255	JEFFERSONTOWN								
Wet Weather	9/8/12	MSD0255	JEFFERSONTOWN								

6.6.2 Bypass Corrective Actions

Each quarter, an assessment of bypasses will occur to determine the root cause of the bypass, the failure category, corrective actions to be taken, possible programmatic solutions, and corrective action completion date. Refer to the table below for causes of bypasses and respective corrective actions that occurred between July 1, 2012, and September 30, 2012.

Bypass Analysis – July 1, 2	012, to September 30, 2012
Bypass Description	Bypass Corrective Actions
Capacity	
- No bypasses of this category occurred during the reporting period.	- N/A
External Power failures (LGE Related-PWR)	
- No bypasses of this category occurred during the reporting period.	- N/A
Facility Failure (Mechanical -MCH, Electrical - ELE, Structural-SRT)	
Jeffersontown WQTC (Hansen Discharge WO: 1553336): Bypass (Electrical Problem) was reported at this WQTC on September 8, 2012. Controls issue allowed 4 secondary influent pumps to run simultaneously. Approximately 1500 gallons discharged to ground due to increased flow to secondary.	 Changed the programming and configuration of the pumps to prevent all four from running simultaneously in future rain events. The Jeffersontown Treatment Plant Elimination Project (Budget ID H07293) will eliminate this WQTC. This project will be completed prior to December 31, 2015.





Jeffersontown WQTC (Hansen Discharge WO: 1553351): Bypass (Electrical Problem) was reported at this WQTC on September 8, 2012. Controls issue allowed 4 secondary influent pumps to run simultaneously. Aeration blowers were disengaged from the previous bypass. Approximately 2000 gallons discharged to ground due to increased flow to secondary.	 Changed the programming and configuration of the pumps to prevent all four from running simultaneously in future rain events. The Jeffersontown Treatment Plant Elimination Project (Budget ID H07293) will eliminate this WQTC. This project will be completed prior to December 31, 2015.
Human Error (OPN)	
 No bypasses of this category occurred during the reporting period. 	- N/A
Utility Damage	
 No bypasses of this category occurred during the reporting period. 	- N/A

6.6.3 Jeffersontown Water Quality Treatment Center

MSD submitted a Jeffersontown WQTC Process Control Plan on October 31, 2008, as required by paragraph 26.a of the Amended Consent Decree. MSD received comments on December 12, 2008, and resubmitted the plan January 16, 2009, and again on February 20,







2009. MSD received conditional approval of this document from EPA on April 1, 2009, pending finalization of the Amended Consent Decree that was under consideration by the Federal Court at the time the Process Control Plan was submitted. The Process Control Plan was accepted by the Federal Court and incorporated by reference into the Amended Consent Decree by an Order signed February 12, 2010, that was entered into public record February 15, 2010.

The following activities occurred at the Jeffersontown WQTC during the reporting period:

- No inspections were required or conducted upstream of the Jeffersontown WQTC Headworks during the reporting period.
- Two bypass events occurred at the Jeffersontown WQTC during this quarter. Included in **Appendix A-3** is a report that lists the details from the bypass events.
- There were no blending events during the reporting period.

6.7 Phosphorus Monitoring at the Prospect WQTCs

As part of the Amended Consent Decree, MSD has agreed to submit phosphorus monitoring data including the calculations of monthly averages with the quarterly reports. MSD WQTCs were under the 1mg/l limit during the reporting period, per the Amended Consent Decree requirement. The following chart displays monthly average phosphorus results for the Prospect WQTCs.







Appendix A-1 - Discharge Work Orders – Dry Weather CSOs



Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
MORRIS FORMAN	KY0022411	147 BUCHANAN ST	04/04/12 9:19: AM	04/04/12 10:03 AM	2,225,000 GAL	Sewer Manhole	CSO020	STREAM	OHIO RIVER	PUMP ONE WENT TO GROUND TRIPPING OUT SUBSTATION	ELECTRICAL PROBLEMS AT MSD	1462563	NONE, OUTLET SUBMERGED IN THE OHIO RIVER.	ISOLATED PUMP ONE AND RESET STATION.
MORRIS FORMAN	KY0022411	1215 ELLISON AVE	06/08/12 9:09: AM	06/08/12 10:22 AM	365 GAL	Sewer Manhole	CSO113	STREAM	SOUTH FORK BEARGRASS CREEK	OBSTRUCTION IN MAIN SEWER	OBSTRUCTION-NOT GREASE OR ROOT	1502459	NO CLEAN UP PERFORMED- PIPE DISCHARGES DIRECTLY INTO STREAM	FLUSHED/VACTORED THE OBSTRUCTION/DEBRIS FROM SEWER
MORRIS FORMAN	KY0022411	1397 S 3RD ST	06/21/12 7:15: PM	06/22/12 08:15 AM	1,560 GAL	Sewer Manhole	CSO200	STREAM	OHIO RIVER	GRIT AND DEBRIS BUILD UP IN LINE	OBSTRUCTION-NOT GREASE OR ROOT	1507021	NO CLEAN UP PERFORMED - DISCHARGE INTO THE CENTRAL RELIEF DRAIN	WORK ORDER 1507059 - VACTOR DRAIN



Appendix A-2 - Discharge Work Orders – Bypass



Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
HITE CREEK	KY0022420	5500 HITT RD	05/29/12 11:15: AM	05/29/12 11:20 AM	2 GAL	Sewer Treatment Plant	MSD0202	STREAM	HITE CREEK	RAIN EVENT CAUSED SUDDEN PLANT FLOW INCREASE	BYPASS AT WQTC	1496224	MSD CLEANED AND SANITIZED AREA	MSD MONITORED STATION TO PREVENT FURTHER OVERFLOW OF SCUM
STARVIEW	KY0031712	423 BERMUDA WAY	05/29/12 10:00: AM	05/29/12 10:15 AM	375 GAL	Sewer Treatment Plant	MSD0247	STREAM	CHENOWETH RUN	POWER OUTAGE DUE TO STORM EVENT	BYPASS AT WQTC	1496181	MSD CLEANED & SANITIZED THE AREA	HOOKED UP GENERATOR TO STOP OVERFLOW
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	06/25/12 12:58: AM	06/25/12 01:08 AM	10,633 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	POWER BLIP AT THE STATION	BYPASS AT WQTC	1508255	NO CLEAN UP SUBMERGED DISCHARGE PIPE	RESET AND PUT SYSTEMS ON LINE
CHENOWETH RUN	KY0042226	14000 BECKLEY TRCE	06/02/12 1:15: PM	06/02/12 02:30 PM	14,198 GAL	Sewer Treatment Plant	MSD0403	GROUND	CHENOWETH RUN	CONTRATOR CUT WATER LINE TO PLANT	BYPASS AT WQTC	1500585	NO CLEAN UP REQUIRED ONLY DECHLORINATION BYPASS AT PLANT	FEEDING POWDER CHLORINE TO DISINFECT UNTILL REPAIRS ARE MADE. NO DECHLORINATION.



Appendix A-3 - Discharge Work Orders – Blending



Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO # Cleanup Efforts by MSD	Repair Efforts by MSD
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	04/01/12 10:47: AM	04/02/12 01:20 AM	1,345,076 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1460013 PIPE SUBMERGED NO CLEANUP REQUIRED	NEGOTATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/13/12 8:06: AM	05/14/12 09:17 AM	4,152,668 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1487852 PIPE SUBMERGED NO CLEANUP REQUIRED	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/29/12 9:54: AM	05/29/12 06:30 PM	839,349 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1496094 PIPE DISCHARGE SUBMERGED- NO CLEAN UP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/31/12 10:57: PM	06/01/12 06:02 PM	899,028 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY	BLENDING AT JTOWN WQTC	1498717 PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.



Appendix A-4 - Discharge Work Orders – Waters of the United States



Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
HITE CREEK	KY0022420	7510 MEADOW STREAM CT	05/13/12 12:35: PM	105/13/12 10:30 PM	14,875 GAL	Sewer Manhole	91087	STREAM	SOUTH FORK HARRODS CREEK	RAIN EVENT CAUSED LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487888	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
HITE CREEK	KY0022420	5500 HITT RD	05/29/12 11:15: AM	1 05/29/12 11:20 AM	2 GAL	Sewer Treatment Plant	MSD0202	STREAM	HITE CREEK	RAIN EVENT CAUSED SUDDEN PLANT FLOW INCREASE	BYPASS AT WQTC	1496224	MSD CLEANED AND SANITIZED AREA	MSD MONITORED STATION TO PREVENT FURTHER OVERFLOW OF SCUM
HITE CREEK	KY0022420	7520 KAVANAUGH RD	04/30/12 9:15: PN	1 04/30/12 09:20 PM	50 GAL	Sewer Lift Station	MSD1085-PS	GROUND	HITE CREEK	LG&E POWER FAIL IN AREA. LG&E HAD THE ONLY ROAD TO STATION BLOCKED. BY THE TIME GENERATOR ARRIVED STATION WET WELL DISCHARGED 50 GALLONS OF SEWAGE.	POWER OUTAGE (LG&E)	1482394	MSD CLEANED & SANITIZED THE AREA	TEMPORARY GENERATOR INSTALLED UNTIL POWER RESTORED
STARVIEW	KY0031712	423 BERMUDA WAY	05/29/12 10:00: AN	1 05/29/12 10:15 AM	375 GAL	Sewer Treatment Plant	MSD0247	STREAM	CHENOWETH RUN	POWER OUTAGE DUE TO STORM EVENT	BYPASS AT WQTC	1496181	MSD CLEANED & SANITIZED THE AREA	HOOKED UP GENERATOR TO STOP OVERFLOW
JEFFERSONTOWN	KY0025194	3258 RUCKRIEGEL PKY	04/01/12 11:48: AN	1 04/02/12 03:00 PM	31,500 GAL	Sewer Manhole	28173	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460084	DISCLN WO# 1460112	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3258 RUCKRIEGEL PKY	05/13/12 11:12: AM	105/13/12 07:08 PM	36,000 GAL	Sewer Manhole	28173	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487893	DISCLN WO# 1488192	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3258 RUCKRIEGEL PKY	05/29/12 10:47: AN	1 05/29/12 05:30 PM	16,910 GAL	Sewer Manhole	28173	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496298	DISCLN WO# 1496946	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	9707 WILLOWWOOD WAY	05/13/12 11:56: AM	1 05/13/12 07:00 PM	19,500 GAL	Sewer Manhole	28336	DITCH	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487947	DISCLN WO# 1488204	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3620 CHARLANE PKY	05/13/12 11:56: AM	1 05/13/12 07:00 PM	9,750 GAL	Sewer Manhole	28340	GROUND	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487945	DISCLN WO# 1488201	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	11401 GRAND AVE	04/01/12 12:06: PN	104/01/12 03:00 PM	7,500 GAL	Sewer Manhole	28551	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460086	DISCLN WO# 1461104	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	11401 GRAND AVE	05/13/12 9:02: AN	105/13/12 04:35 PM	7,500 GAL	Sewer Manhole	28551	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487892	DISCLN WO# 1488186	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	11401 GRAND AVE	05/29/12 10:42: AN	1 05/29/12 05:50 PM	27,000 GAL	Sewer Manhole	28551	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496507	DISCLN WO# 1496621	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3200 RUCKRIEGEL PKY	04/01/12 12:00: PN	104/01/12 04:46 PM	9,000 GAL	Sewer Manhole	64505	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460085	DISCLN WO# 1461096	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3200 RUCKRIEGEL PKY	05/13/12 11:23: AN	105/13/12 07:07 PM	10,500 GAL	Sewer Manhole	64505	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487944	DISCLN WO# 1488197	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	3200 RUCKRIEGEL PKY	05/29/12 11:02: AN	105/29/12 01:03 PM	47,000 GAL	Sewer Manhole	64505	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496562	DISCLN WO# 1496924	LOCATION INCLUDED IN THE IOAP
JEFFERSONTOWN	KY0025194	11804 CHIPPEWA RIDGE LN	05/13/12 3:20: PN	105/14/12 02:30 AM	16,750 GAL	Sewer Manhole	92061	GROUND	CHENOWETH RUN	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487912	PIPE DISCHARGE SUBMERGED- NO CLEANUP	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	04/01/12 10:47: AN	104/02/12 01:20 AM	1,345,076 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1460013	PIPE SUBMERGED NO CLEANUP REQUIRED	NEGOTATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/13/12 8:06: AN	105/14/12 09:17 AM	4,152,668 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1487852	PIPE SUBMERGED NO CLEANUP REQUIRED	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/29/12 9:54: AN	105/29/12 06:30 PM	839,349 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT	BLENDING AT JTOWN WQTC	1496094	PIPE DISCHARGE SUBMERGED- NO CLEAN UP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	05/31/12 10:57: PM	06/01/12 06:02 PM	899,028 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	LACK OF SYSTEM CAPACITY	BLENDING AT JTOWN WQTC	1498717	PIPE DISCHARGE SUBMERGED- NO CLEANUP	NEGOTIATIONS ARE UNDERWAY TO ALLOW TEMPORARY BLENDING AT THIS LOCATION.
JEFFERSONTOWN	KY0025194	10725 OLD TAYLORSVILLE RD	06/25/12 12:58: AM	06/25/12 01:08 AM	10,633 GAL	Sewer Treatment Plant	MSD0255	STREAM	CHENOWETH RUN	POWER BLIP AT THE STATION	BYPASS AT WQTC	1508255	NO CLEAN UP SUBMERGED DISCHARGE PIPE	RESET AND PUT SYSTEMS ON LINE
SILVER HEIGHTS	KY0028801	9718 TITAN DR	05/13/12 12:55: PM	05/13/12 09:00 PM	10,625 GAL	Sewer Manhole	61667	GROUND	MUD CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487980	MSD CLEANED AND SANITIZED AFFECTED AREA	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP.
SILVER HEIGHTS	KY0028801	3501 GRISSOM WAY	05/13/12 1:22: PM	05/13/12 11:10 PM	31,000 GAL	Sewer Manhole	61687	GROUND	MUD CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487982	RAKE AND BAG/ NO LIME	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP.
DEREK R. GUTHRIE	KY0078956	9715 EL PRADO ST	05/30/12 4:35: AM	05/30/12 04:55 AM	1,000 GAL	Sewer Manhole	09730	GROUND	PONDER CREEK	DURING RAIN EVENT BOTH PUMPS TRIPPED AT STATION	MECHANICAL FAILURE	1496551	MSD CLEANED & SANITZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
DEREK R. GUTHRIE	KY0078956	6102 COOPER CHAPEL RD	05/05/12 3:40: AM	05/05/12 06:00 AM	3,500 GAL	Sewer Manhole	25479	CATCH BASIN	PENNSYLVANIA RUN	RAINEVENT CAUSED LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1484019	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL OBSERVE & MONITOR FOR REPAIR
DEREK R. GUTHRIE	KY0078956	6102 COOPER CHAPEL RD	05/13/12 1:30: PM	05/14/12 12:00 AM	48,375 GAL	Sewer Manhole	25479	CATCH BASIN	PENNSYLVANIA RUN	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487899	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
DEREK R. GUTHRIE	KY0078956	10304 CAVEN AVE	04/01/12 12:05: PM	04/01/12 08:05 PM	24,000 GAL	Sewer Manhole	27116	STREAM	MUD CREEK	HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460033	MSD'S PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	AREA INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	10304 CAVEN AVE	05/05/12 6:20: AM	05/05/12 04:30 PM	22,500 GAL	Sewer Manhole	27116	STREAM	MUD CREEK	LACK OF CAPACITY	LACK OF SYSTEM CAPACITY	1484002	MSD CLEANED AND SANITIZED AFFECTED AREA	AREA INCLUDED IN THE IOAP
DEREK R. GUTHRIE	KY0078956	10304 CAVEN AVE	05/13/12 8:40: AM	05/14/12 05:00 AM	61,000 GAL	Sewer Manhole	27116	STREAM	MUD CREEK	LACK OF SYSTEM CAPACITY - HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487867	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	D A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP.□
DEREK R. GUTHRIE	KY0078956	6810 SANDSTONE BLVD	04/01/12 11:55: AM	04/01/12 12:45 PM	1,250 GAL	Sewer Manhole	29948	GROUND	FERN CREEK	LACK OF CAPACITY	LACK OF SYSTEM CAPACITY	1460045	MSD CLEANED AND SANITIZED AFFECTED AREA	SCHEDULE A CLEANUP. AREA INCLUDED IN IOAP
DEREK R. GUTHRIE	KY0078956	6810 SANDSTONE BLVD	05/13/12 12:45: PM	05/13/12 06:35 PM	11,125 GAL	Sewer Manhole	29948	GROUND	FERN CREEK	LACK OF CAPACITY	LACK OF SYSTEM CAPACITY	1487872	MSD CLEANED AND SANITIZED AFFECTED AREA	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP.
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	04/01/12 11:59: AM	04/01/12 12:55 PM	1,425 GAL	Sewer Manhole	31073	DITCH	FERN CREEK	LACK OF CAPACITY	LACK OF SYSTEM CAPACITY	1460026	MSD CREW CLEANED AND SANITIZED AFFECTED AREA	NEED A WEED CREW TO CUT GRASS, SCHEDULE A CLEANUP AREA INCLUDED IN IOAP
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	05/13/12 12:24: PM	05/13/12 07:45 PM	24,990 GAL	Sewer Manhole	31073	DITCH	FERN CREEK	LACK OF CAPACITY	LACK OF SYSTEM CAPACITY	1487868	MSD CLEANED AND SANITIZED AFFECTED AREA	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP.
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	04/01/12 11:58: AM	04/01/12 12:55 PM	2,850 GAL	Sewer Manhole	31074	DITCH	FERN CREEK	LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1460058	MSD CLEANED AND SANITIZED AFFECTED AREA	INCLUDED IN IOAP
DEREK R. GUTHRIE	KY0078956	6808 SANDSTONE BLVD	05/13/12 12:41: PM	05/13/12 06:45 PM	25,260 GAL	Sewer Manhole	31074	DITCH	FERN CREEK	LACK OF CAPACITY	LACK OF SYSTEM CAPACITY	1487869	MSD CLEANED AND SANITIZED AFFECTED AREA	A SOLUTION FOR THIS LOCATION IS INCLUDED IN THE IOAP.
DEREK R. GUTHRIE	KY0078956	9114 CINDERELLA LN	05/13/12 12:50: PM	05/14/12 12:30 AM	70,000 GAL	Sewer Manhole	60679	DITCH	FISHPOOL CREEK	RAINEVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487890	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
DEREK R. GUTHRIE	KY0078956	3706 NOBEL CT	05/29/12 11:40: AM	05/29/12 04:00 PM	9,999 GAL	Sewer Lift Station	MSD0049-PS	GROUND	MILL CREEK	LACK OF SYSTEM CAPACITY DUE TO RAIN EVENT IN THE AREA	LACK OF SYSTEM CAPACITY	1496289	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & OBSERVE FOR REPAIRS
DEREK R. GUTHRIE	KY0078956	9114 CINDERELLA LN	05/05/12 3:50: AM	05/05/12 12:30 PM	10,400 GAL	Sewer Lift Station	MSD1013-PS	DITCH	FISHPOOL CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1484021	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
MORRIS FORMAN	KY0022411	804 N ARBOR DR	05/13/12 4:23: PM	05/14/12 01:00 AM	12,925 GAL	Sewer Manhole	00056-W	GROUND	MIDDLE FORK BEARGRASS CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487917	NO CLEANUP; MANHOLE IN THE MIDDLE OF THE STREET.	THIS SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	804 N ARBOR DR	05/13/12 4:23: PM	05/14/12 01:00 AM	38,775 GAL	Sewer Manhole	00746	DITCH	MIDDLE FORK BEARGRASS CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487915	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	8021 CHRISTIAN CT	05/29/12 12:32: PM	05/29/12 04:54 PM	6,000 GAL	Sewer Manhole	02932	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496330	DISCLN WO# 1496614	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7900 SHELBYVILLE RD	05/29/12 12:22: PM	05/29/12 04:52 PM	32,000 GAL	Sewer Manhole	02933	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496326	DISCLN WO# 1496606	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	7900 SHELBYVILLE RD	05/29/12 12:17: PM	05/29/12 04:49 PM	36,000 GAL	Sewer Manhole	02935	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496328	DISCLN WO# 1496610	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3726 FINCASTLE RD	05/29/12 8:33: AM	05/31/12 05:00 PM	15,000 GAL	Sewer Manhole	08717	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496351	DISCLN WO# 1496722	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	04/01/12 12:04: PM	04/01/12 05:14 PM	303,355 GAL	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460088	NO CLEANUP REQUIRED, PIPE DISCHARGE SUBMERGED	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	05/13/12 8:03: AM	05/13/12 02:15 PM	1,368,241 GAL	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487891	NO CLEANUP OCCURRED, PIPE DISCHARGE SUBMERGED.	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	05/29/12 9:46: AM	05/29/12 11:27 PM	1,621,039 GAL	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496107	NO CLEANUP REQUIRED, PIPE DISCHARGE SUBMERGED	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1001 BRECKENRIDGE LN	06/01/12 5:36: PM	06/01/12 06:45 PM	92,118 GAL	Sewer Manhole	08935-SM	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1500446	NO CLEANUP REQUIRED, PIPE DISCHARGE SUBMERGED	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	04/01/12 11:08: AM	04/04/12 06:14 AM	54,000 GAL	Sewer Manhole	104231	GROUND	CAMP TAYLOR DITCH	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460089	DISCLN WO# 1460104	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/13/12 6:45: AM	05/13/12 12:31 PM	72,000 GAL	Sewer Manhole	104231	GROUND	CAMP TAYLOR DITCH	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487948	DISCLN WO# 1487994	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/29/12 8:13: AM	05/31/12 05:02 PM	140,000 GAL	Sewer Manhole	104231	GROUND	CAMP TAYLOR DITCH	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496353	DISCLN WO# 1496530	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/31/12 9:43: PM	06/04/12 03:55 PM	11,500 GAL	Sewer Manhole	104231	GROUND	CAMP TAYLOR DITCH	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1498844	DISCLN WO# 1500068	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1562 MCKAY AVE	05/29/12 8:16: AM	05/29/12 06:05 PM	1,200 GAL	Sewer Manhole	13931	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1499927	NONE NEEDED-MSD CLEANED AND SANITIZED AREA	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	04/01/12 11:09: AM	04/04/12 06:15 AM	720 GAL	Sewer Manhole	13943	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460090	DISCLN WO# 1460105	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/13/12 6:46: AM	05/13/12 12:32 PM	1,800 GAL	Sewer Manhole	13943	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487949	DISCLN WO# 1487996	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/29/12 8:14: AM	05/31/12 05:03 PM	27,500 GAL	Sewer Manhole	13943	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496444	DISCLN WO# 1496531	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	4119 LEE AVE	05/31/12 9:44: PM	06/04/12 03:53 PM	3,500 GAL	Sewer Manhole	13943	GROUND	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1498845	DISCLN WO# 1500071	LOCATION INCLUDED IN THE IOAP

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
MORRIS FORMAN	KY0022411	1726 FRASER DR	05/29/12 9:30: AM	05/29/12 06:40 PM	32,000 GAL	Sewer Manhole	16649	DITCH	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496466	DISCLN WO# 1496918	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2201 GERALD CT	05/29/12 12:54: PM	05/29/12 06:53 PM	45,000 GAL	Sewer Manhole	18298	STREAM	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496474	DISCLN WO# 1496773	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2201 GERALD CT	05/29/12 12:53: PM	05/29/12 06:57 PM	45,000 GAL	Sewer Manhole	18299	STREAM	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496502	DISCLN WO# 1496909	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3107 DELL BROOKE AVE	05/13/12 12:50: PM	05/13/12 09:47 PM	619,500 GAL	Sewer Manhole	18471	CATCH BASIN	SOUTH FORK BEARGRASS CREEK	SET PUMPS TO ALLEVIATE PROPERTY DAMAGE AND FLOODING DURING A SIGNIFICANT RAIN EVENT	PUMPED OVERFLOW	1487877	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	THIS LOCATION IS IN THE INTERIM SANITARY SEWER DISCHARGE PLAN
MORRIS FORMAN	KY0022411	3107 DELL BROOKE AVE	05/29/12 9:58: AM	05/29/12 05:07 PM	822,600 GAL	Sewer Manhole	18471	CATCH BASIN	SOUTH FORK BEARGRASS CREEK	SET PUMPS TO ALLEVIATE PROPERTY DAMAGE AND FLOODING DURING A SIGNIFICANT RAIN EVENT	PUMPED OVERFLOW	1496183	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	THIS LOCATION IS IN THE INTERIM SANITARY SEWER DISCHARGE PLAN
MORRIS FORMAN	KY0022411	3015 BOAIRES LN	05/13/12 1:08: PM	05/13/12 08:37 PM	492,100 GAL	Sewer Manhole	18483	CATCH BASIN	SOUTH FORK BEARGRASS CREEK	SET PUMPS TO ALLEVIATE PROPERTY DAMAGE AND FLOODING DURING A SIGNIFICANT RAIN EVENT	PUMPED OVERFLOW	1487886	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	THIS LOCATION IS IN THE INTERIM SANITARY SEWER DISCHARGE PLAN
MORRIS FORMAN	KY0022411	3015 BOAIRES LN	05/29/12 10:07: AM	05/29/12 07:35 PM	986,800 GAL	Sewer Manhole	18483	CATCH BASIN	SOUTH FORK BEARGRASS CREEK	SET PUMPS TO ALLEVIATE PROPERTY DAMAGE AND FLOODING DURING A SIGNIFICANT RAIN EVENT	PUMPED OVERFLOW	1496186	MSD PERSONNEL CLEANED AND SANITIZED AFFECTED AREA	THIS LOCATION IS IN THE INTERIM SANITARY SEWER DISCHARGE PLAN
MORRIS FORMAN	KY0022411	3540 RAMONA AVE	05/29/12 10:13: AM	05/29/12 02:17 PM	295,700 GAL	Sewer Manhole	18505	CATCH BASIN	SOUTH FORK BEARGRASS CREEK	SET PUMPS TO ALLEVIATE PROPERTY DAMAGE AND FLOODING DURING A SIGNIFICANT RAIN EVENT	PUMPED OVERFLOW	1496189	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	THIS LOCATION IS IN THE INTERIM SANITARY SEWER DISCHARGE PLAN
MORRIS FORMAN	KY0022411	110 FAIRMEADE RD	05/31/12 8:30: AM	05/31/12 09:15 AM	40 GAL	Sewer Manhole	21151	CATCH BASIN	MIDDLE FORK BEARGRASS CREEK	BAD O RING AT PIPE JOINT	MECHANICAL FAILURE	1497246	NO DEBRIS	REPAIRED THE O RING
MORRIS FORMAN	KY0022411	7404 ARROWWOOD RD	05/13/12 10:50: AM	05/13/12 11:20 AM	1,500 GAL	Sewer Manhole	21628-W	DITCH	GOOSE CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487884	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	3302 TROUT CREEK DR	05/13/12 4:47: PM	05/13/12 08:12 PM	4,500 GAL	Sewer Manhole	23211	STREAM	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1488209	DISCLN WO# 1488209	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3302 TROUT CREEK DR	05/29/12 10:51: AM	05/29/12 05:03 PM	105,000 GAL	Sewer Manhole	23211	STREAM	SOUTH FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496464	DISCLN WO# 1496762	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3317 BROWNSBORO RD	04/01/12 10:19: AM	04/01/12 11:35 AM	2,025 GAL	Sewer Manhole	26752	DITCH	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460087	DISCLN WO# 1461479	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	3317 BROWNSBORO RD	05/29/12 8:56: AM	05/29/12 05:20 PM	35,000 GAL	Sewer Manhole	26752	DITCH	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496109	DISCLN WO# 1496951	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	04/01/12 12:03: PM	04/02/12 12:00 PM	90,000 GAL	Sewer Manhole	27005	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460079	DISCLN WO# 1460109	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	05/13/12 11:56: AM	05/13/12 06:16 PM	105,000 GAL	Sewer Manhole	27005	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487954	DISCLN WO# 1488081	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	05/29/12 11:42: AM	05/29/12 09:04 PM	82,000 GAL	Sewer Manhole	27005	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496511	DISCLN WO# 1496647	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	05/31/12 10:39: PM	06/01/12 10:35 AM	7,200 GAL	Sewer Manhole	27005	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1498843	DISCLN WO# 1500065	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	04/01/12 11:58: AM	04/01/12 05:30 PM	43,000 GAL	Sewer Manhole	40559	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460083	DISCLN WO# 1460111	LOCATION INCLUDED IN THE IOAP

Associated Wastewater Treatment Plant Name	Associated Treatment Plant KPDES #	Overflow Location	Overflow Start Date & Time	Overflow Stop Date & Time	Volume of Overflow	Source Asset Type	Source Asset ID	Facility Discharges To	Receiving Stream	Cause of Overflow	Due To	WO #	Cleanup Efforts by MSD	Repair Efforts by MSD
MORRIS FORMAN	KY0022411	1012 ALTA CIR	05/13/12 11:40: AM	05/13/12 06:14 PM	59,000 GAL	Sewer Manhole	40559	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1487956	DISCLN WO# 1488087	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1012 ALTA CIR	05/29/12 11:48: AM	1 05/29/12 09:08 PM	126,000 GAL	Sewer Manhole	40559	STREAM	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496322	DISCLN WO# 1496669	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	5 RIO VISTA DR	04/01/12 1:00: PM	04/02/12 02:15 AM	227,250 GAL	Sewer Manhole	40879	STREAM	MUDDY FORK BEARGRASS CREEK	RAIN EVENT CAUSED LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1460056	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	5 RIO VISTA DR	05/13/12 11:35: AM	105/14/12 08:30 AM	94,125 GAL	Sewer Manhole	40879	STREAM	MUDDY FORK BEARGRASS CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487883	CONTRACTORS CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	5 RIO VISTA DR	05/29/12 12:15: PM	05/29/12 06:15 PM	1,800 GAL	Sewer Manhole	40879	STREAM	MUDDY FORK BEARGRASS CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1496325	MSD CLEANED AND SANITIZED AREA	MSD WILL MONOTOR LOCATION DURING RAIN EVENTS
MORRIS FORMAN	KY0022411	2 RIO VISTA DR	04/01/12 1:00: PM	04/02/12 02:15 AM	530,250 GAL	Sewer Manhole	40880	GROUND	MUDDY FORK BEARGRASS CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1460057	MSD CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	2 RIO VISTA DR	05/13/12 11:35: AM	05/14/12 08:30 AM	313,750 GAL	Sewer Manhole	40880	GROUND	MUDDY FORK BEARGRASS CREEK	RAINEVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1487881	CONTRACTORS CLEANED & SANITIZED THE AREA	SITE FOUND DURING RAIN EVENT RECON- WILL MONITOR & EVALUATE FOR REPAIR
MORRIS FORMAN	KY0022411	2 RIO VISTA DR	05/29/12 12:17: PM	105/29/12 06:15 PM	47,800 GAL	Sewer Manhole	40880	GROUND	MUDDY FORK BEARGRASS CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1496331	MSD CLEANED AND SANITIZED AREA	MSD WILL MONITOR SITE DURING RAIN EVENT
MORRIS FORMAN	KY0022411	3503 MOUNT RAINIER DR	06/05/12 12:35: PM	06/05/12 03:12 PM	7,850 GAL	Sewer Manhole	42922	STREAM	GOOSE CREEK	UNKNOWN OBSTRUCTION IN MAIN SEWER	OBSTRUCTION-NOT GREASE OR ROOT	1501612	MSD PERSONNEL WILL CLEAN AND SANITIZE THE IMPACTED AREA AROUND THE MANHOLE	MSD PERSONNEL FLUSHED THE MAIN SEWER TO REMOVE THE OBSTRUCTION.
MORRIS FORMAN	KY0022411	1635 BELMAR DR	04/01/12 11:02: AM	04/04/12 06:16 AM	3,600 GAL	Sewer Manhole	44396	GROUND	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460092	DISCLN WO# 1461008	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1635 BELMAR DR	05/29/12 8:29: AM	05/31/12 04:59 PM	30,000 GAL	Sewer Manhole	44396	GROUND	MUDDY FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496472	DISCLN WO# 1496767	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	2002 MILLVALE RD	05/29/12 4:18: PM	05/29/12 09:02 PM	66,000 GAL	Sewer Manhole	45829	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496509	DISCLN WO# 1496641	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1132 ROSTREVOR CIR	04/01/12 12:03: PM	04/02/12 01:40 PM	63,000 GAL	Sewer Manhole	45835	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1460077	DISCLN WO# 1460108	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	1132 ROSTREVOR CIR	05/29/12 4:14: PM	05/29/12 09:03 PM	81,500 GAL	Sewer Manhole	45835	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496508	DISCLN WO# 1496628	LOCATION INCLUDEDIN THE IOAP
MORRIS FORMAN	KY0022411	1904 EMBASSY SQUARE BLVD	06/07/12 5:00: PM	06/07/12 06:38 PM	20 GAL	Sewer Manhole	46161	CATCH BASIN	SOUTH FORK BEARGRASS CREEK	OBSTRUCTION IN MAIN SEWER	OBSTRUCTION-NOT GREASE OR ROOT	1502376	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	WORK ORDER 1502402- FLUSHED AND REMOVED OBSTRUCTION FROM MAIN SEWER
MORRIS FORMAN	KY0022411	7800 WESTPORT RD	05/29/12 10:30: AM	05/29/12 12:30 PM	1,800 GAL	Sewer Manhole	46891	DITCH	GOOSE CREEK	RAIN EVENT CAUSED A LACK OF SYSTEM CAPACITY	LACK OF SYSTEM CAPACITY	1496337	MSD CLEANED AND SANTIZED AREA	MSD MONOTORED AREA DURING RAIN EVENT
MORRIS FORMAN	KY0022411	8021 CHRISTIAN CT	05/29/12 12:43: PM	05/29/12 04:59 PM	72,000 GAL	Sewer Manhole	47593	GROUND	MIDDLE FORK BEARGRASS CREEK	LACK OF SYSTEM CAPACITY-HEAVY RAIN	LACK OF SYSTEM CAPACITY	1496338	DISCLN WO# 1496620	LOCATION INCLUDED IN THE IOAP
MORRIS FORMAN	KY0022411	8703 POINTE ARBOR LN	04/25/12 8:00: PM	04/25/12 10:00 PM	3,000 GAL	Sewer Manhole	48661	GROUND	SOUTH FORK BEARGRASS CREEK	OBSTRUCTION IN MAIN SEWER	OBSTRUCTION-NOT GREASE OR ROOT	1479487	MSD PERSONNEL CLEANED AND SANITIZED THE IMPACTED AREA	WORKORDER 1479496 - FLUSHED THE MANHOLE



Appendix B – CSO Flow Monitoring Data



Appendix B – CSO Flow Monitoring Data Comments

In 63 of the graphs, On September 28th, there appears to be a Combined Sewer Overflow with no contributing rain data. On that day, MSD recorded rain at the Rain Gauge at TR12-Nightingale Pump Station and TR04-Morris Forman WQTC, but did NOT record rain at TR05-Beargrass Pump Station. All of the CSOs on that day were due to rain in the combined sewer area.

This comment applies to the following CSOs: CSO020, CSO028, CSO034, CSO036, CSO038, CSO050, CSO051, CSO052, CSO053, CSO054, CSO055, CSO057, CSO058, CSO082, CSO083, CSO084, CSO088, CSO091, CSO092, CSO093, CSO104, CSO109, CSO111, CSO113, CSO117, CSO118, CSO119, CSO121, CSO125, CSO126, CSO130, CSO132, CSO137, CSO140, CSO141, CSO144, CSO146, CSO149, CSO150, CSO153, CSO154, CSO155, CSO160, CSO166, CSO167, CSO172, CSO178, CSO181, CSO182, CSO183, CSO185, CSO186, CSO187, CSO190, CSO193, CSO195, CSO196, CSO198, CSO201, CSO202, CSO203, CSO205, CSO207, CSO208.



CSO015 (07/01/12 to 10/01/12)

- Flow (MGD)

-

TR04_Morris Forman WQTC.Rain (in)



CSO018 (07/01/12 to 10/01/12)

Nightingale PS.CSO018 Flow (MGD) TR12_Nightingale PS.Rain (in)







Flow (MGD) TR05_Beargrass PS.Rain (in)







CSO028 (07/01/12 to 10/01/12)

Flow (MGD) TR05_Beargrass PS.Rain (in)



CSO029 (07/01/12 to 10/01/12)

Flow 1 (MGD)

TR05_Beargrass PS.Rain (in)



CSO031 (07/01/12 to 10/01/12)

Flow (MGD)

TR05_Beargrass PS.Rain (in)



CSO034 (07/01/12 to 10/01/12)

Flow (MGD) TR05_Beargrass PS.Rain (in)





CSO038 (07/01/12 to 10/01/12)

Flow (MGD) TR05_Beargrass PS.Rain (in)





Flow 1 (MGD)

▼ TR05_Beargrass PS.Rain (in)



CSO051 (07/01/12 to 10/01/12)

M1 Flow (MGD) TR05_Beargrass PS.Rain (in)



CSO052 (07/01/12 to 10/01/12)

Level (in)

TR05_Beargrass PS.Rain (in)





Flow 1 (MGD) TR05_Beargrass PS.Rain (in)










CSO058 (07/01/12 to 10/01/12)

Flow 1 (MGD)



CSO082 (07/01/12 to 10/01/12) **v**

Level (in)



CSO083 (07/01/12 to 10/01/12)





CSO088 (07/01/12 to 10/01/12)

M1 Flow (MGD)







CSO092 (07/01/12 to 10/01/12)

TR05_Beargrass PS.Rain (in)

M1 Flow (MGD)







CSO097 (07/01/12 to 10/01/12)

C097_FLOW_MGD (MGD) TR12_Nightingale PS.Rain (in)





Flow (MGD)





CSO105 (07/01/12 to 10/01/12)

-

- Flow 1 (MGD)

TR04_Morris Forman WQTC.Rain (in)



CSO108 CDS Unit (07/01/12 to 10/01/12)

Flow (MGD) TR12_Nightingale PS.Rain (in)



CSO109 (07/01/12 to 10/01/12)



CSO110 (07/01/12 to 10/01/12)

Flow 1 (MGD)

TR12_Nightingale PS.Rain (in)







CSO113 (07/01/12 to 10/01/12)

CSO117 (07/01/12 to 10/01/12)



CSO118 (07/01/12 to 10/01/12)

Flow 1 (MGD)



CSO119 (07/01/12 to 10/01/12)

level (in)
TR05_Beargrass PS.Rain (in)





CSO121 (07/01/12 to 10/01/12)

TR05_Beargrass PS.Rain (in)

Flow 1 (MGD)









CSO126 (07/01/12 to 10/01/12)



--- Flow 1 (MGD) TR05_Beargrass PS.Rain (in)





CSO132 (07/01/12 to 10/01/12)



CSO137 (07/01/12 to 10/01/12)

Flow 1 (MGD)





CSO140 (07/01/12 to 10/01/12)

Flow 1 (MGD)

CSO141 (07/01/12 to 10/01/12)





CSO142 (04/01/12 to 07/01/12)

CSO144 (07/01/12 to 10/01/12)








Flow 1 (MGD)



CSO150 (07/01/12 to 10/01/12)

Flow 1 (MGD)



CSO151 (07/01/12 to 10/01/12)

Flow 1 (MGD) TR12_Nightingale PS.Rain (in)



CSO152 (07/01/12 to 10/01/12)

Flow 1 (MGD)

TR12_Nightingale PS.Rain (in)





CSO154 (07/01/12 to 10/01/12)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)







Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO166 (07/01/12 to 10/01/12)

Flow 1 (MGD)





CSO167 (07/01/12 to 10/01/12)

Flow 1 (MGD)

07/02/12

07/09/12

07/16/12

07/23/12

07/30/12

08/06/12

08/13/12

08/20/12

08/27/12

09/03/12

09/10/12

09/17/12

TR05_Beargrass PS.Rain (in)

09/24/12

10/01/12

CSO172 (07/01/12 to 10/01/12)

level (in)



CSO174 (07/01/12 to 10/01/12)

Flow 1 (MGD)







CSO181_CSO035 (07/01/12 to 10/01/12) **V**

Flow-CSO035 (MGD)





Flow 1 (MGD) TR05_Beargrass PS.Rain (in)



CSO183 (07/01/12 to 10/01/12)

Flow (MGD)



CSO185_CSO184 (07/01/12 to 10/01/12)



CSO186 (07/01/12 to 10/01/12)

Level (in) TR05_Beargrass PS.Rain (in)



CSO187 (07/01/12 to 10/01/12)

Level (in)





Flow (MGD) TR05_Beargrass PS.Rain (in)





- Flow 1 (MGD) TR04_Morris Forman WQTC.Rain (in)

-





CSO191 (07/01/12 to 10/01/12)

Flow (MGD)

TR04_Morris Forman WQTC.Rain (in)





Flow (MGD) TR05_Beargrass PS.Rain (in)



CSO195 (07/01/12 to 10/01/12)

Flow (MGD) TR05_Beargrass PS.Rain (in)





CSO197 (07/01/12 to 10/01/12)

TR05_Beargrass PS.Rain (in)

-0.00

10/01/12

Level (in)



08/06/12

08/13/12

08/20/12

08/27/12

09/10/12

09/03/12

09/17/12

09/24/12

07/09/12

07/16/12

07/23/12

07/30/12

07/02/12

CSO198 (07/01/12 to 10/01/12)

Level (in) TR05_Beargrass PS.Rain (in)







Flow 1 (MGD)

TR12_Nightingale PS.Rain (in)





CSO201 (07/01/12 to 10/01/12)

Flow (MGD) TR05_Beargrass PS.Rain (in)



Flow (MGD) TR05_Beargrass PS.Rain (in)





08/20/12

08/13/12

08/27/12

09/10/12

09/03/12

09/17/12

09/24/12

10/01/12

08/06/12

CSO203 (07/01/12 to 10/01/12)

Flow (MGD)

07/02/12

07/09/12

07/16/12

07/23/12

07/30/12

CSO205 (07/01/12 to 10/01/12)

Flow (MGD)



CSO206 (07/01/12 to 10/01/12)

Flow 1 (MGD) TR05_Beargrass PS.Rain (in)


CSO207 (07/01/12 to 10/01/12)

Flow 1 (MGD)

TR05_Beargrass PS.Rain (in)



CSO208 (07/01/12 to 10/01/12)

TR05_Beargrass PS.Rain (in)

Flow 1 (MGD)





CSO210 (07/01/12 to 10/01/12) (MGD)

CSO210 Flow (MGD)

TR04_Morris Forman WQTC.Rain (in)

CSO211 (07/01/12 to 10/01/12)

Flow (MGD)

TR04_Morris Forman WQTC.Rain (in)





Appendix C – Acronyms



Appendix C - Acronyms for Project WIN Quarterly Report

AAM	Advanced Asset Management
AAOV	Annual Average Overflow Volume
ADAPS	Automated Data Processing System
BGC	Beargrass Creek
BMP	Best Management Practices
CCP	Composite Correction Plan
CD	Consent Decree
CMF	Central Maintenance Facility
CMMS	Computerized Maintenance Management System
СМОМ	Capacity Management Operations and Maintenance
CPE	Comprehensive Performance Evaluations
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
CSSA	Continuing Sewer System Assessment
DAP	Discharge Abetement Plan (DAP)
DMR	Discharge Monitoring Report
eB	Enterprise Bridge (Spescom scanning software for document management)
EMC	Event Mean Concentration
EPA	Environmental Protection Agency
ERP	Enforcement Response Plan
FM	Force Main
FOG	Fats Oil & Grease
FPS	Flood Pump Station
ESE	Food Service Establishment
FY	Fiscal Year
GCE	Grease Control Equipment
GIS	Geographical Information System
GLPM	Gravity Line Preventive Maintenance
	Human Machine Interface
	Infrastructure & Flood Protection (MSD Division)
	Intercentor Condition Assessment
	Identification
	Inflow and Infiltration
IMS	Information Management System
	Integrated Overflow Abstement Plan
	Integrated Overnow Abatement Flam
IJJUF	Internition Technology
	Industrial Wests Department
	Industrial Waste Department
JCP3	Jenerson County Public Schools
KDEP	Kentucky Department of Environmental Protection
KPDE5	Kentucky Politicant Discharge Elimination System
	Kenlucky
	Lateral Extension
	Low Impact Development
	Laboratory Information Management System
	Long Term Control Plan
	Louig Territ Control Fide Louisville and Jofferson County Information Concertium
	Louisville and Jenerson County Information Consolitum
	Main Diversion Structure
INIER	main Equipment Building

1

Appendix C - Acronyms for Project WIN Quarterly Report

MFWTP	Morris Forman Wastewater Treatment Plant
MG	Million Gallons
MGD	Million Gallons Per Day
MLK	Martin Luther King
МО	Metro Operations
MOA	Memorandum of Agreement
MOR	Monthly Operating Report
MOU	Memorandum of Understanding
MSD	Metropolitan Sewer District (Louisville and Jefferson County)
NDD	Non-Domestic Dischargers
NMC	Nine Minimum Controls
NPR	National Public Radio
ORSANCO	Ohio River Valley Water Sanitation Commission
PACP	Pipeline Assessment and Certification Program
PCM	Post Construction Monitoring
PI	Plant Information System
PM	Preventive Maintenance
POC	Pollutants of Concern
PP	Pumping Package
PS	Pump Station
PSC	Property Service Connection
RDII	Rainfall-Derived Infiltration and Inflow
RS	Regulatory Services
RTC	Real Time Control
SCADA	Supervisory Control And Data Acquisition
SCAP	System Capacity Assurance Plan
SIU	Significant Industrial User
SOP	Standard Operating Procedure
SORP	Sewer Overflow Response Protocol
SSDP	Sanitary Sewer Discharge Plan
SSES	Sanitary Sewer Evaluation Study
SSO	Sanitary Sewer Overflow
SSOP	Sanitary Sewer Overflow Plan
SWOR2	Southwestern Outfall Relief - Phase 2
SWPS	Southwestern Pump Station
ТМ	Technical Memorandum
TMDL	Total Maximum Daily Load
TV	Television
UIM	Utility Information Management
UK	University of Kentucky
USACE	US Army Corps of Engineers
USF&W	United States Fish and Wildlife
USGS	United States Geological Survey
WDR	Wastewater Discharge Regulators
WIN	Waterway Improvements Now
WQT	Water Quality Tool
WQTC	Water Quality Treatment Center
WW	Wet Weather
WWT	Wet Weather Team