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April 30, 2017

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U.S. Department of Justice  
Post Office Box 7611  
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Subject: Annual Report - Addendum  
July 1, 2015 through June 30, 2016  
Civil Action No. 3:08-cv-00608-CRS  
DOJ Case No. 90-5-1-1-08254

Attention Director and Chiefs:

Please find attached an addendum to our Annual Report, prepared in accordance with Paragraph 30 of our Amended Consent Decree. This report is for the period July 1, 2015, through June 30, 2016.

Clarification has been provided for the definitions of “overflows to the exterior” and “overflows to the interior” as used in Section 1. Additionally, Figure 1.2 on page 4 and Table 1.32 on page 35 were presented with months ordered as though the data was summarized by calendar year (January to December), when the data in the figure and table, respectively, was summarized by MSD’s fiscal year (July to June); the corrected figure and table are included in the addendum. Finally, clarification has been provided for the definitions of the assessment results presented in Table 4.9.

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

If you have questions or need additional information, please contact me at (502) 540-6136.

Sincerely,



Angela Akridge, PE  
MSD Chief Engineer

cc: James A. Parrott  
Paula Purifoy  
File

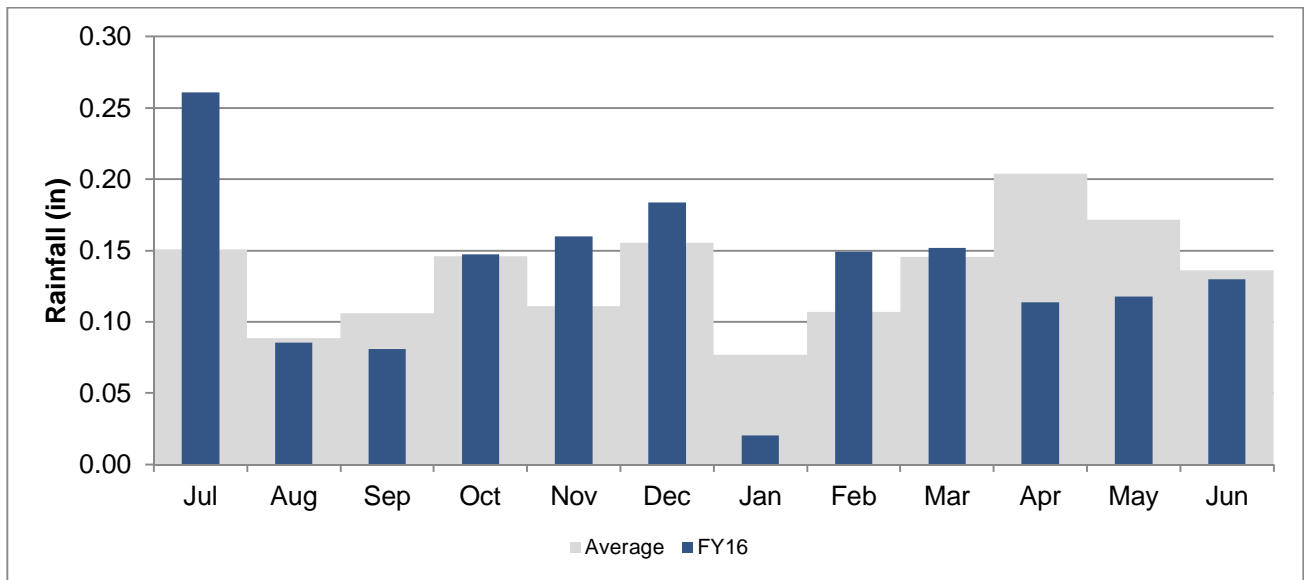
### 1.2.1.2. DISCHARGES

MSD enters and maintains information related to unauthorized discharges and overflows that are observed by MSD staff in the Hansen Information Management System (Hansen) utilizing procedures reviewed and improved through efforts associated with components of the Sewer Overflow Response Protocol (SORP), as required under the Amended Consent Decree. These discharges are categorized using the following categories:

- Overflow – Per the SORP manual dated August 22, 2016, overflows are defined as Sanitary Sewer Overflows (SSOs), dry weather Combined Sewer Overflows (CSOs) and releases on Water Quality Treatment Center (WQTC) property that do not reach Waters of the United States
- Unauthorized Discharge – Per the SORP manual dated August 22, 2016, (a) any discharge of wastewater to Waters of the United States from MSD's Sewer System or WQTCs through a point source not authorized by a KPDES permit; and, (b) any Bypass at MSD's WQTCs prohibited pursuant to the provisions of 40 C.F.R. § 122.41(m)(2) and (4) or 401 KAR 5:065, Section 1(13)(a) and (c).
- Asset Type
  - Water Quality Treatment Center (WQTC)
  - Combined Sewer Overflow (CSO)
  - Collections System Assets associated with a Sanitary Sewer Overflow (SSO)
    - Pump Stations –sanitary, flood and viaduct pump stations
    - Access Points – manholes, valves and inlets
    - Mains – sanitary and combined system mains
    - Service Connections – customer service lines
- Weather – Dry or wet
- Result – The ultimate impact of the overflow
  - Waters of the United States (WUS) – Per the SORP manual dated August 22, 2016, WUS is defined as any unauthorized discharge that reaches Waters of the United States as defined in 40 C.F.R. § 122.2
  - Exterior (EXT) – Any overflow from a non-permitted location that discharges to the ground
  - Interior (INT) – Any overflow that discharges directly into the interior of a building

- Problem – The issue that caused the discharge, including the following groups:
  - Bypass / Upset at a WQTC or Blending at Jeffersontown WQTC as defined by permit
  - Capacity – Lack of Capacity or Pumped Overflow during wet weather
  - Maintenance & Operations Issue – Electrical Problem at MSD, Grease Blockage, Mechanical Failure, Obstruction (Not Grease or Roots), Power Outage, Pumped due to USACE Manual Requirements, Roots, Structural Issue, or Utility Damage

**Figure 1.2. Daily Average Rainfall by Month (Revised)**



**Table 1.32. Hauled Volumes by Fiscal Year and Month (Revised)**

MONTH	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
FY08	22,200	0	13,900	1,168,150	41,500	1,470,550	164,300	857,950	4,016,003	1,752,920	1,049,000	19,000
FY09	62,000	24,500	1,834,650	10,000	13,600	550,800	1,330,701	785,280	34,300	634,500	572,400	337,400
FY10	1,367,140	1,794,300	426,300	1,581,951	13,900	452,851	897,800	451,400	100,050	178,650	2,245,750	162,900
FY11	199,501	112,501	571,750	63,622	944,900	76,400	111,500	1,034,200	868,650	2,541,850	1,524,001	660,401
FY12	72,600	146,500	261,800	3,500	938,050	738,701	196,700	12,500	267,101	162,800	604,402	62,700
FY13	33,000	0	77,501	39,300	0	568,701	444,500	0	753,600	58,400	235,500	178,101
FY14	287,603	15,500	320,502	366,101	165,300	167,600	90,400	125,000	22,600	556,711	167,302	0
FY15	41,001	66,500	133,200	58,501	5,000	194,000	0	9,500	509,400	250,300	3,000	58,101
FY16	130,900	3,651	76,000	42,500	95,000	176,102	3,500	115,500	24,700	4,004	2	0

#### 4.5.2 PROJECT PERFORMANCE REPORTING

As described in Volume 1, Section 6.5.2 of the 2012 IOAP Modification, dated May 2014, beginning with the FY14 Annual Report, MSD has agreed to provide annual reports on performance findings for completed projects and self-identify cases where the performance falls below the committed level of control and defining remedial measures and schedule to improve performance to the appropriate level. It is the intent that performance analyses will be conducted for all constructed IOAP projects as monitoring data becomes available. To complete this effort and independently assess IOAP projects that have been certified to date, MSD has partnered with the University of Louisville Center for Infrastructure Research (UofL) for the majority of the IOAP projects.

Current performance reporting is updated to include additional projects certified through June 30, 2015, with data through the end of the current reporting period.

MSD committed to an analysis of twelve months of final effluent sampling to determine performance of the Derek R. Guthrie WQTC Flow Equalization and Treatment Project, which was completed July 10, 2015. For all other CSO / DWO and SSO projects, the period for monitoring performance and compliance encompasses a three-year window following construction. Green demonstration projects were determined to meet performance commitments based on reported benefit and improvement to MSD's Green Infrastructure Program, as reported in Annual Report 7. Two supplemental environmental projects (SEPs) were assessed for successful restoration.

Detailed performance status of each project is included in Table 4.9. Definitions for assessment results are as follows:

- Pass – The project has met the approved level of control,
  - If the assessment completion date is provided, project assessment is complete.
  - If the assessment completion date shows “Ongoing”, project assessment will continue.
- Remediation Required – The project was recommended for remediation in the form of operation and / or structural modifications.
- Phased Project – The project was recommended for remediation and will continue to be assessed until all project phases are completed.
- Additional Monitoring Required – The project was recommended for remediation, but requires additional monitoring to determine the appropriate remedial measures.
- Operational Issue Addressed – Remedial measures were accomplished through implementation of an updated operational procedure.

Of the 64 projects analyzed to date, 35 have met the criteria for final committed level of control as discussed and 29 remain under assessment. Projects identified to need additional monitoring or remediation are detailed in Table 4.10. Projects that have been completed through the assessment date but have not been assessed as of the current reporting period and are detailed in Table 4.11.