



2019 CMOM PROGRAM UPDATE

ISSUED: FEBRUARY 2020

This Capacity, Management, Operation and Maintenance (CMOM) plan update has been prepared by the Fox Metro Water Reclamation District (Fox Metro) to fulfill the requirements set forth in Fox Metro's National Pollution Discharger Elimination System (NPDES) permit. Fox Metro's permit #IL0020818 was effective on June 1, 2019. Special Condition #18 specifies that the CMOM must be updated at least annually.

Fox Metro's original CMOM was completed on May 31, 2016. The entirety of the original CMOM was reviewed in December 2019. This plan update, contained herein, only details the changes from the original CMOM plan. The remainder remains materially consistent or unchanged since 2016.

CMOM-wide changes

- Fox Metro's field operations department still utilizes CASSWORKS for their asset management and maintenance tracking. They now also use Maintenance Connect, another brand of asset management software. The intention is to eventually switch all tracking to the Maintenance Connect system.
- Fox Metro no longer has a Field Services Manager position. The Field Operations Supervisor reports directly to the District Manager.
- The Grease Program and Pretreatment Ordinances were updated and adopted in 2019 and 2017, respectively. Copies are included in Updated Appendix F – Current Ordinances.

Specific Changes to Text Sections

Section 2.1 Description of Collection System

The number of service connections remains the same at over 80,000 but the number in each use category has changed slightly.

Section 2.2 District Organization

A new Fox Metro organizational chart is presented as Updated Appendix D.

Section 2.3 Legal Authority

Fox Metro's Sewer Use Ordinance (SUO) was updated and adopted by the Board of Trustees in August 2019. A copy is included in Updated Appendix F – Current Ordinances.

Section 2.4 Other Ordinances and Regulations

Updated Permit Forms are included in Appendix G. These include: Connection Permit Form, Repair Permit Form, and Water Service Inspection Request Form.

Section 2.5 Revenues

As of June 2019, Fox Metro's fee structure was updated. Residential users are charged \$6.53 per 1,000 gallons of water used. A copy of the fee structure is included in Updated Appendix H.

Fox Metro's projected financial statement of revenues and expenses from 2019 to 2023 is included in Updated Appendix I.

Section 2.6 Sanitary Sewer Operating Expenditures

The fiscal year 2018-2019 Field Operations total expenditures were \$2,378,669 and is inclusive of all labor and maintenance items.

Section 2.7 Planned Sanitary Sewer Capital Improvements

Fox Metro has made significantly more capital expenditures than originally planned due to an expedited sewer lining program schedule.

Section 2.8 Design and Capacity

The phosphorus removal improvements were completed in summer 2019, ahead of the NPDES-mandated deadline.

Section 2.9 Performance Monitoring

The monthly average wastewater influent rates for 2016, 2017, and 2018 were slightly higher than previous years due to above average precipitation.

Section 2.10 Record Keeping, Reporting, and Monitoring

Fox Metro's basic GIS data entry process has been completed since the original CMOM plan. The GIS information is continually modified and upgraded as changes are made and more detailed information is added.

Section 2.12 CMOM Communication Plan

General information and a copy of the original CMOM were added to Fox Metro's website in 2016. The full document was removed from the website in December 2019 in anticipation of the annual update. It is Fox Metro's intention to add a summary document for the general public in the next year instead of the full document to make it easier for the public to understand.

Section 2.13 CMOM Annual Review

The annual CMOM update report will not be submitted to the IEPA since a submittal is not required in the current NPDES permit. Instead, an annual notification that the CMOM update was completed will be sent to the IEPA per the IEPA's request.

Section 3.2 Budget

Key items from the 2019-2020 fiscal year Field Operations budget with updated descriptions are shown on the table below.

Updated Table 3.1 – CMOM-relevant 2019-2020 Budget Items

Line Item	Description	Budget Amount
Contractor Televising	Ongoing TV in unincorporated areas as part of the routine maintenance	\$300,000
IGA Sewer Investigations	Sewer investigation work in incorporated areas	\$300,000
Developer Televising	Televising done in new construction areas	\$50,000
CSO Expenses	Work done at the City of Aurora's CSO facility on Broadway. Rebilled to City.	\$125,000
Contract Cleaning of Sewers	Ongoing cleaning of the interceptors	\$247,500
General Supplies and Maintenance	Manhole frames, covers, lids, root kill chemicals, etc.	\$85,400
General Repair of Sewers	Manhole rehab and replacement, grouting, etc.	\$375,000
Lift Station Maintenance	Pump and motor maintenance, repairs, retrofits, etc.	\$380,000
Odor Control	Chemicals at pump stations	\$240,000
Capital Expenditures	Field Operations building addition and CIPP sewer lining projects	\$6,284,500
TOTAL		\$8,387,400

Section 3.3 Capital Projects

In addition to the annual general cleaning and repairs conducted throughout Fox Metro's service area, several large capital projects have been completed or are underway to improve the collection system since the 2016 CMOM report was issued. These projects include:

- Exposition View sanitary sewer repair Phase 2, completed spring 2016, \$120,179.70
- Moecherville sanitary sewer repairs, completed spring 2018, \$369,694.15
- 2016 CIPP sanitary sewer lining, North Aurora area, completed 2017, \$1,498,717.00.
- 2017-2018 CIPP sanitary sewer lining, Illinois Ave. area, completed 2019, \$2,427,887.00
- 2018-2019 CIPP sanitary sewer lining, far east side Aurora area, currently finishing, \$4,040,370.10

Additionally, the North Aurora Pump Station replacement is scheduled for 2020.

Section 3.9.3 Hydrogen sulfide control program

Fox Metro currently only uses Bioxide® at the Farnsworth pump station for hydrogen sulfide control. Potassium permanganate is utilized at the Orchard Road pump station because has the added benefit of fats, oils, and grease reduction. An ozone unit (Vapex®) has been installed at the Reckinger Road pump station for odor control. The remaining pump stations have had upgrades to reduce odors or are located in areas without significant public receptors to warrant odor control methods.

Section 3.11 Pretreatment Program

Fox Metro's most recent Pretreatment Ordinance was approved by the USEPA in July 2017. The industrial user base changes as industrial users enter and exit the program. An annual pretreatment report is due to the USEPA in April of each year. As of April 2019, there are 29 significant industrial users and 16 categorical industrial users in the program.

Section 4.1 Recent SSO events

An updated list of collection system SSO events from 2017 to 2019 is summarized in the table below in chronological order. All of these events were reported to the IEPA via the Notification Summary Reports.

Updated Tables 4.1 and 4.2 Wet and Dry Collection System SSO events

Start Date	Estimated Duration (hrs.)	Estimated Volume (gal.)	Location	Wet or Dry?	Cause/Actions/ Comments
03/31/17	3.5	1,000+	Offutt Ln, North Aurora Siphon Chamber	Wet	Saturated ground followed by an additional downpour of 3" rainfall overwhelmed the sanitary sewer system. The area was being investigated for I/I. CIPP lining in the tributary area was subsequently completed.
03/31/17	3.5	1,000+	Smith Blvd, Aurora. (MH #160R-015)	Wet	Saturated ground followed by an additional downpour of 3" rainfall overwhelmed the sanitary sewer system. The City of Aurora subsequently found a cross-connection upstream of the interceptor. Fixed in 2018.
10/14/17	4	Unknown	Waubonsie Interceptor Siphon Chamber at Rte. 25 in unincorporated Oswego	Wet	Excessive rainfall and widespread flooding caused the siphon chamber to surcharge to the ditch along Route 25. The new Waubonsie Junction Box directly upstream of this structure is online as of spring 2019 and should help alleviate overflow from this structure.
02/20/18	3	500-1000	670 Gerten Ave. Aurora	Wet	Heavy rainfall coupled with frozen ground conditions caused an abrupt inflow into the collection system. There was a sanitary sewer backup in the residence. Sanitary sewer jetting was performed to remove the blockage downstream, resolving the issue.

05/21/18	1	5,000	OCSI River St. access hatch, Aurora	Wet	Heavy rainfall added to already saturated ground, inundating the sanitary sewer system. This area is part of the City of Aurora's LTCP and should improve as they continue their compliance measures. Additionally, heavy cleaning and CIPP lining has continued in this area.
10/23/18	Unknown	Unknown	East side of Orchard Rd., S. of Route 30, unincorporated Montgomery	Dry	A broken sanitary sewer forcemain. Repaired.
04/27/19	36-48	900K- 1M	SWC of Raintree Ct and Gregory St., Aurora	Dry	Contractor conducting the CIPP lining project left plug in sanitary sewer and caused SSO. Was resolved in 90 minutes after observed. No basement backups were reported.
05/01/19	<1	100	45 Longbeach Rd., Boulder Hill	Wet	Excessive rain inundated system and caused a basement backup. Boulder Hill is televised frequently and I&I areas are prioritized for repairs.
05/01/19	6	1.5M-3M	Mill Rd. Siphon, Montgomery	Wet	Widespread flooding and 4" of rainfall resulted in 2 interceptors reaching maximum capacity. Vault surcharged. May 2019 was the wettest May on record.

Section 5.0 Asset Management Plan

The updated asset inventory is included in Updated Appendix R.

Section 6.0 SSO Response Plan

Call Out phone numbers and the Service Community Contact List were updated in November 2019 for the SSO response plan. Copies of these documents are included in Updated Appendix S.