

## 7.1 Audit Plan Development

The Audit Plan developed and documented here is a requirement of the 2002 Stipulation Agreement (Stipulation) (1) between the State of Wisconsin and the Milwaukee Metropolitan Sewerage District (MMSD or District). The Audit Plan serves to define the method, responsibilities, timeline, and documentation that will be used to complete an audit of the MMSD Capacity, Management, Operation, and Maintenance (CMOM) Program.

CMOM principles were proposed by the United States Environmental Protection Agency (USEPA) as part of the draft Sanitary Sewer Overflow (SSO) rule (2) that was subsequently withdrawn. The withdrawn SSO rule, although never formally adopted, was considered, in the absence of other guidance, in developing the Audit Plan. However, the Stipulation requirements and District CMOM Program were the primary considerations.

This Audit Plan is a further development of the Audit Plan Strategy that was documented in the *MMSD CMOM Readiness Review and Implementation Strategy Development (CMOM Strategic Plan)* (3) completed in December 2005.

The Stipulation requirements, withdrawn SSO rule, and District CMOM objectives are discussed below.

### 7.1.1 Stipulation Requirements

The Stipulation, which requires the District to develop and implement a CMOM program, is the primary driver of the Audit Plan. The Stipulation states:

“7. While sanitary sewer overflows in the District’s system have been significantly reduced, there are still sanitary sewer overflows within the District’s and its satellite municipalities’ sanitary sewer systems. To continue the District’s program to reduce with the goal of eliminating all non-permitted sanitary sewer overflows, the District shall implement the regional Capacity, Management, Operation and Maintenance (CMOM) program. The regional CMOM shall be comprised of four integrated components:”

The fourth component listed is:

“D. *Communication and Program Audit Plan.* On a regular basis the District shall report to the Department on the implementation and performance of the CMOM program. The communication and program audit plan shall allow for public input during the development and implementation of the CMOM.”

Although the communication and audit portions of the CMOM program are listed together in the stipulation, they are addressed in separate plans. The audit portion is addressed in this plan. The communication portion is addressed in the Communication Plan, Chapter 6 of this document.

### **7.1.2 Principles from Withdrawn SSO Rule**

Auditing requirements are included in the withdrawn SSO Rule that had been proposed by the USEPA in 2001. The auditing requirements were listed in §122.42 (e) (2) (ix) of the withdrawn SSO Rule, as shown below:

“CMOM Program Audits. – As part of the NPDES permit application, you must conduct an audit, appropriate to the size of the system and the number of overflows, and submit a report of such audit, evaluating your CMOM and its compliance with this subsection, including its deficiencies and steps to respond to them.”

Although the withdrawn SSO rule was never promulgated, in the absence of other guidance, the District has considered this withdrawn rule in developing its CMOM Program, including the Stipulation-required Audit Plan.

### **7.1.3 District Objectives**

CMOM Management Plan Overall Objective 2 (Chapter 2, section 2.2.1.1.2 of this document) is to “Communicate the goals and objectives of the CMOM Program to internal and external stakeholders, monitor the CMOM Program implementation and institute Program modifications.”

Most of this objective is addressed by the Communication Plan. However, the Audit Plan will specifically address monitoring the CMOM Program implementation and instituting Program modifications.

### **7.1.4 Audit Plan Components**

As part of the CMOM Program Communication Plan (Chapter 6 of this document), a CMOM Program annual report will be produced. The annual report will include updates to the Program. The audit will include a review of the entire CMOM Program. Any large scale and structural changes found to be necessary to the CMOM Program will be completed and documented during the audit. There will therefore be a section of the Audit Plan for Annual Updating (7.2.1), the CMOM Program Audit (7.2.2), and also a section for the documenting and processing of Program changes (7.2.3).

## 7.2 Audit Plan

The Audit Plan will be comprised of the following three sections:

- Annual updating - completed and reported through the CMOM Program Annual Report
- Program Audit - completed and reported through the CMOM Program Audit Report
- Program change procedures

### 7.2.1 Annual Updating

The annual updates to the CMOM Program will include a review of three areas. The first area will be the performance measures and the strategies that the District has in place to achieve the performance measures. The second area reviewed will be the suggestions that are provided through internal and external means for Program improvement. Lastly, the gaps that were identified during the CMOM readiness review that was completed before preparation of the *CMOM Strategic Plan* will be reviewed. Progress on gap closure will be determined and additional strategies that may be necessary for further gap closure will be analyzed and discussed.

The CMOM Program Manager will be responsible for completing the annual review and update, preparing the documentation (included in the CMOM Program Annual Report) and coordinating the District's internal review.

#### 7.2.1.1 Performance Measures

The Management Plan (Chapter 2, section 2.2.6 of this document) contains all of the District performance measures that will be measured as part of the CMOM Program. These performance measures are set-up to be evaluated and reviewed annually to provide immediate feedback on the effectiveness of District operations and the performance of the CMOM Program. The performance measures chosen were those that were readily available, easily determined and directly related to the aim of the objective.

During preparation of the CMOM Program annual reports, all of the CMOM performance measures will be evaluated and tracked over time. For each of these performance measures, a discussion will be provided to address:

1. The value of the measurement
2. The status of the measurement
3. The relevance of the measure to the objective
4. Any changes in strategy necessary to achieve further gains

#### 7.2.1.2 CMOM Program Input

The District will be soliciting input on the CMOM Program from stakeholders through a variety of means that are discussed in the Communication Plan. They include portals on District web sites for internal and external input, Division meetings, Technical Advisory Team (TAT) meetings, and Consultant and Contractor meetings. These suggestions will be compiled and documented in the Input Compilation Report.

For the purposes of the annual update, the suggestions will be grouped by the CMOM Plan that they involve. The suggestions will be reviewed as to: 1) Necessity for compliance with regulations; 2) Compliance with District objectives; and 3) Costs and benefits. The items will be discussed as a group and individually, as necessary, to provide a basis for including any of the suggestions into the Program.

### **7.2.1.3 Review of Original Gaps**

A listing of gaps was created during the District's CMOM readiness review, completed prior to the preparation of the *CMOM Strategic Plan*. This listing of gaps has been addressed through the implementation of this CMOM Program and undertaking of other District projects. Since completion of the readiness review, the District has completed many capital projects to address system deficiencies, begun preparations of a new agreement for the Operation and Maintenance (O&M) of District facilities, begun the implementation of the Geographical Information System (GIS) Vision and prepared the 2020 Facilities Plan. Many of the original gaps are in part being addressed through these items, making it necessary to review this list and ensure that the identified gaps are being properly addressed.

### **7.2.2 CMOM Program Audit**

The CMOM Program audit will occur during the first half of the year 2012 and the report will be prepared by September 30, 2012. This will allow sufficient time to review the report and consider the recommendations for the renewal of the District Wisconsin Pollutant Discharge Elimination System (WPDES) permit that will likely be reissued in 2013.

The audit will include a review of the District CMOM performance measures, District CMOM Benchmarks and additional considerations, each of which is discussed below. The audit process will be conducted under the direction of the CMOM Program Manager and may include outside consultants or representatives from comparable utilities on the review panel, working in conjunction with the CMOM work team.

#### **7.2.2.1 Performance Measures**

The performance measures that are listed in the CMOM Program Management Plan (Chapter 2, section 2.2.6 of this document) will be reviewed as to the current value, status and trend for the past five years. This review will indicate whether the District objectives are being attained and whether the trend is better performance or not. Either may indicate that individual strategies should be reviewed and revised with the goal of continuing to meet the CMOM objectives into the future.

Discussion will include a broad look at the performance measures for the overall CMOM Program and the three District service areas of: 1) Conveyance; 2) Treatment; and 3) Watercourse. Where specific performance measures are not being attained, detailed discussion and commentary will be included. The result may be a recommended change to the program, which could take the form of a revised objective, a revised strategy, a revised tactic, different performance measures, or lower attainment criteria for the performance measure.

### **7.2.2.2 Benchmarks**

The benchmarks that are listed in the CMOM Program Management Plan (Chapter 2, section 2.2.5 of this document) will be reviewed in a manner similar to the performance measures. There will be a review of the value for the current year and of the trend over the past five years. In addition, the values and trends for similar agencies will be obtained and compared to the District's values and trends. The District will use the benchmarks to not only determine attainment of objectives, but to view the trends in the industry. This additional information is invaluable in helping the District to maintain an up-to-date, environmentally sound, and cost-effective status.

Discussion will include a broad look at the benchmarks that are listed in the CMOM Program by area. Where specific benchmarks are indicating that the District is not meeting an objective and/or not in the better half of similar wastewater utilities, a detailed discussion and commentary will be included. The result may be a recommended change to the program, which could take the form of a revised objective, a revised strategy, a revised tactic, or a revision to the benchmark.

### **7.2.2.3 Additional Considerations**

During the audit, several additional items will be considered that may affect a change in the CMOM Program. They are:

- Existing WPDES Permit Requirements
- Anticipated Regulatory Requirements
- MMSD Strategic Plan Goals

#### **7.2.2.3.1 Existing Permit Requirements**

The current District WPDES Permit (5) will expire in 2008. When the District receives the next permit, it may contain additional requirements, such as further monitoring, overflow reduction, changes in reporting requirements, etc. These may impact the goals and objectives that are stated in the CMOM program and the way the District measures performance. These will be discussed and addressed in the CMOM Program Audit Report.

#### **7.2.2.3.2 Anticipated Regulatory Requirements**

As mentioned previously, the audit will occur shortly before the permit renewal anticipated for 2013. During the period leading up to the audit, communications with the Wisconsin Department of Natural Resources (WDNR) may indicate that future permits will contain additional requirements. In addition, the USEPA may reintroduce the withdrawn SSO rules from 2001 or similar rules with requirements for wastewater agencies. These may all contain additional requirements for CMOM programs. These will be discussed and addressed in the CMOM Program Audit Report.

#### **7.2.2.3.3 District Strategic Plan Goals**

The District is currently on a three year cycle for preparing an overall strategic plan to meet its goals. The current strategic plan is for the years 2007 through 2009 (4). By the

time of the CMOM Program Audit, another strategic plan will have been prepared and mostly implemented. The District may alter policies, programs and procedures that will affect the elements of the CMOM Program. These issues will be discussed and addressed in the CMOM Program Audit Report.

### **7.2.3 Program Change Procedures**

As a result of the audit, the CMOM Program will be updated. The procedure for updating this will be similar to the preparation of the initial CMOM Program. The CMOM Program Manager is responsible for ensuring the reviews listed above are completed and documented. Internal review teams, consisting of appropriate representation from across the District, will be formed for each chapter of the program. The changes that are being considered will be discussed by the review team, in coordination with the CMOM Program Manager. The result of the discussions will be the recommended program changes.

The CMOM Program Manager will prepare the updated CMOM Program and send it through the internal review process at the District. After internal approval is complete, the updated Program will be forwarded to the District's Permit Administrator at the WDNR or another named WDNR representative.