

## Stipulation Requirements of the District's CMOM Program

Below is the portion of the text (from pages 7, 8, and 9) of the Stipulation entered into between the Milwaukee Metropolitan Sewerage District and the State of Wisconsin in 2002 that describes the District CMOM Program requirements.

### **“CAPACITY, MANAGEMENT, OPERATION AND MAINTENANCE (CMOM) PROGRAM**

6. Combined sewer overflows and sanitary sewer overflows present important concerns for public health and the environment. The State, through the Department of Natural Resources, acknowledges that the District has accomplished significant reductions in the number of overflows experienced with the District's Metropolitan Interceptor Sewer System through implementation of the Water Pollution Abatement Program (WPAP.)

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:

A. *Management Plan.* A plan that outlines the goals of the CMOM, the organizational structure to manage it, the legal authority to control infiltration and inflow (I/I), design criteria, benchmarking data, and performance measures to attain the goals. A significant effort associated with the Management Plan shall be the development of an asset management (AM) program that provides for both programmed maintenance and tracking of the asset condition to enable early recognition of expansions or major rehabilitation necessary to avoid capacity limitations.

B. *Overflow Response Plan.* An overflow response plan that identifies measures to protect public health and the environment. This plan will outline the public notification, permit reporting, measuring and monitoring steps to be taken during an overflow event.

C. *System Evaluation and Capacity Assurance Plan.* A Plan for system evaluation and capacity assurance for peak flow conditions. This plan shall identify necessary capital improvements to meet the projected flows and an implementation plan that describes timing and responsibilities for implementing each capital project.

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.

E. The approach to be used by the District to initiate and maintain the CMOM program shall include the following steps:

- 1) Retention of a consultant by no later than December 31, 2002, to provide program oversight and guidance.
- 2) Review of existing operations and existing management and capital improvement plans.
- 3) Development of an action plan to assess the required changes to existing plans and to develop a critical plan approach to a CMOM program

## Stipulation Requirements of the District's CMOM Program

4) Concurrent with previous steps, review of existing information on asset management, including field verification as required, and software development to provide a simplified data base to manage the capital assets of the District.

5) Open and maintain a CMOM dialog with the 28 satellite municipalities through the Technical Advisory Team with the goal of assisting the satellite municipalities with developing individual CMOM programs. The District shall develop prospective measures for the satellite systems that will reflect the requirements of the District's CMOM program.

6) This entire CMOM initiative will be coordinated with the ongoing facilities planning and shall be completed by no later than June 30, 2007 and documented in the 2020 Facilities Plan to ensure future oversight of this program.

## Withdrawn SSO Rule

Below is the draft SSO Rule language (USEPA proposed rule § 122.42 paragraphs (e), (f), and (g)) that was proposed in 2001 and subsequently withdrawn.

- “(e) **Municipal Sanitary Sewer System – Capacity, Management, Operation and Maintenance Programs.** (1) General Standards. You, the permittee, must:
- (i) Properly manage, operate, and maintain, at all times, all parts of the collection system that you own or over which you have operational control;
  - (ii) Provide adequate capacity to convey base flows and peak flows for all parts of the collection system you own or over which you have operational control;
  - (iii) Take all feasible steps to stop, and mitigate the impact of, sanitary sewer overflows in portions of the collection system you own or over which you have operational control;
  - (iv) Provide notification to parties with a reasonable potential for exposure to pollutants associated with the overflow event; and
  - (v) Develop a written summary of your CMOM Program and make it, and the audit under paragraph (e) (2) (ix) of this section, available to any member of the public upon request.
- (2) Components of CMOM Program. You must develop and implement a capacity, management, operation and maintenance (CMOM) program to comply with paragraph (e)(1) of this section. If you believe that any element of this section is not appropriate or applicable for your CMOM program, your program does not need to address it, but your written summary must explain why that element is not applicable. The Director will consider the quality of the CMOM program, its implementation and effectiveness in any relevant enforcement action, including but not limited to any enforcement action for violation of the prohibition of any municipal sanitary sewer system discharges described at paragraph (f) of this section. The program must include the following components, with the exception of non-applicable components as discussed above:
- (i) Goals. You must specifically identify the major goals of your CMOM program, consistent with the general standards identified above.
  - (ii) Organization. You must identify:
    - (A) Administrative and maintenance positions responsible for implementing measures in your CMOM program, including lines of authority by organization chart or similar document; and
    - (B) The chain of communication for reporting SSOs under paragraph (g) of this section from receipt of a complaint or other information to the person responsible for reporting
  - (iii) Legal Authority. You must include legal authority, through sewer use ordinances, service agreements or other legally binding documents, to:
    - (A) Control infiltration and connections from inflow sources;

## Withdrawn SSO Rule

- (B) Require that sewers and connections be properly designed and constructed;
  - (C) Ensure proper installation, testing, and inspection of new and rehabilitated sewers (such as new or rehabilitated collector sewers and new or rehabilitated service laterals);
  - (D) Address flows from municipal satellite collection system; and
  - (E) Implement the general and specific prohibitions of the national pretreatment program that you are subject to under 40 CFR 403.5.
- (iv) Measures and Activities. Your CMOM program must address the following elements that are appropriate and applicable to your system and identify the person or position in your organization responsible for each element:
- (A) Provide adequate maintenance facilities and equipment;
  - (B) Maintenance of a map of the collection system;
  - (C) Management of information and use of timely, relevant information to establish and prioritize appropriate CMOM activities (such as the immediate elimination of dry weather overflows or overflows into sensitive waters such as public drinking water supplies and their source waters, swimming beaches and waters where swimming occurs, shellfish beds, designated Outstanding National Resource Waters, National Marine Sanctuaries, waters within Federal, State, or local parks, and water containing threatened or endangered species or their habitat), and identify and illustrate trends in overflows, such as frequency and volume;
  - (D) Routine preventive operation and maintenance activities;
  - (E) A program to assess the current capacity of the collection system and treatment facilities which you own or over which you have operational control;
  - (F) Identification and prioritization of structural deficiencies and identification and implementation of short-term and long-term rehabilitation actions to address each deficiency;
  - (G) Appropriate training on a regular basis; and
  - (H) Equipment and replacement parts inventories including identification of critical replacement parts.
- (v) Design and Performance Provisions. You must establish:
- (A) Requirements and standards for the installation of new sewers, pumps and other appurtenances; and rehabilitation and repair projects; and
  - (B) Procedures and specifications for inspecting and testing the installation of new sewers, pumps and other appurtenances and for rehabilitation and repair projects.
- (vi) Monitoring, Measurement, and Program Modifications. You must:
- (A) Monitor the implementation and, where appropriate, measure the effectiveness of each element of your CMOM program; and

## Withdrawn SSO Rule

- (B) Update program elements as appropriate based on monitoring or performance evaluations; and
  - (C) Modify the summary of your CMOM program as appropriate to keep it updated and accurate.
- (vii) Overflow Emergency Response Plan. You must develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. The plan must include mechanisms to:
- (A) Ensure that you are made aware of all overflows, to the greatest extent possible;
  - (B) Ensure that overflows (including those that do not discharge to waters of the U.S.) are appropriately responded to, including ensuring that reports of overflows are immediately dispatched to appropriate personnel for investigation and appropriate response;
  - (C) Ensure appropriate immediate notification to the public, health agencies, other impacted entities (e.g. water suppliers) and the NPDES authority. The CMOM program should identify the public health and other officials who will receive immediate notification;
  - (D) Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained; and
  - (E) Provide emergency operations.
- (viii) System Evaluation and Capacity Assurance Plan. You must prepare and implement a plan for system evaluation and capacity assurance if peak flow conditions are contributing to an SSO discharge or to noncompliance at a treatment plant unless you have already taken steps to correct the hydraulic deficiency or the discharge meets the criteria of paragraph (f) (2) [Discharges Caused by Severe Natural Conditions] of this section. At a minimum the plan must include:
- (A) Evaluation. Steps to evaluate those portions of the collection system which you own or over which you have operational control which are experiencing or contributing to an SSO discharge caused by hydraulic deficiency or to noncompliance at a treatment plant. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, provide estimates of the capacity of key system components, identify hydraulic deficiencies (including components of the system with limiting capacity) and identify the major sources that contribute to the peak flows associated with overflow events.
  - (B) Capacity Enhancement Measures. Establish short- and long-term actions to address each hydraulic deficiency including prioritization, alternatives analysis, and a schedule.
  - (C) Plan Updates. The plan must be updated to describe any significant change in proposed actions and/or implementation schedule. The plan must also be updated to reflect available information on the performance of measures that have been implemented.

## Withdrawn SSO Rule

- (ix) **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.
- (3) **Communications.** – The permittee should communicate on a regular basis with interested parties on the implementation and performance of its CMOM program. The communication system should allow interested parties to provide input to the permittee as the CMOM program is developed and implemented.
- (4) **Small Collection Systems.** – The Director of the NPDES authority may make the following modifications when establishing the CMOM program permit condition for:
- (i) Municipal sanitary sewer collection systems with an average daily flow of 1.0 million gallons per day or less, the CMOM permit provision may omit the following paragraphs: (e) (2) (iii)(A) through (E); (e) (2) (iv) (A), and (e) (2) (iv) (C) through (H) of this section. In addition, the requirements in paragraph (e) (2) (v) of this section may be modified for municipalities that are not expected to have significant new installations of sewers, pumps and other appurtenances.
  - (ii) Municipal sanitary sewer collection systems with an average daily flow of 2.5 million gallons per day or less, the requirement to develop a written summary of the permittee’s CMOM plan ((e) (1) (v)) and the requirement to conduct an audit and prepare a written audit report ((e) (2) (ix)) may be omitted unless triggered by the occurrence of an SSO that discharges to waters of the United States from the permittee’s collection system during the term of the permit.
- (f) **Municipal Sanitary Sewer Systems – Prohibition of Discharges.** (1) **General Prohibition.** Municipal sanitary sewer system discharges to waters of the United States that occur prior to a publicly owned treatment works (POTW) treatment facility are prohibited. The term POTW treatment facility means an apparatus or device designed to treat flows to comply with effluent limitations based on secondary treatment regulations or more stringent water quality-based requirements. Neither the bypass or the upset provisions at § (m) and (n), respectively, apply to these discharges.
- (2) **Discharges Caused by Severe Natural Conditions.** – The Director may take enforcement action against the permittee for a prohibited municipal sanitary sewer system discharge caused by natural conditions unless the permittee demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (i) The discharge was caused by severe natural conditions (such as hurricanes, tornados, widespread flooding, earthquakes, tsunamis, and other similar natural conditions);
  - (ii) There were no feasible alternatives to the discharge, such as the use of auxiliary treatment facilities, retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, or an

## Withdrawn SSO Rule

- increase in the capacity of the system. This provision is not satisfied if, in the exercise of reasonable engineering judgment, the permittee should have installed auxiliary or additional collection system components, wastewater retention or treatment facilities, adequate back-up equipment or should have reduced inflow and infiltration; and
- (iii) The permittee submitted a claim to the Director within 10 days of the date of the discharge that the discharge meets the conditions of this provision.
- (3) **Discharges Caused by Other Factors.** – For discharges prohibited by paragraph (f) (1) of this section, other than those covered under paragraph (f) (2) of this section, the permittee may establish an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the permittee demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (i) The permittee can identify the cause of the discharge event;
- (ii) The discharge was exceptional, unintentional, temporary and caused by factors beyond the reasonable control of the permittee;
- (iii) The discharge could not have been prevented by the exercise of reasonable control, such as proper management, operation and maintenance; adequate treatment facilities or collection system facilities or components (e.g., adequately enlarging treatment or collection facilities to accommodate growth or adequately controlling and preventing infiltration and inflow); preventive maintenance; or installation of adequate backup equipment;
- (iv) The permittee submitted a claim to the Director within 10 days of the date of the discharge that the discharge meets the conditions of this provision; and
- (v) The permittee took all reasonable steps to stop, and mitigate the impact of, the discharge as soon as possible.
- (4) **Burden of proof.** In any enforcement proceeding, the permittee has the burden of proof to establish that the criteria in this section have been met.
- (g) **Municipal Sanitary Sewer Systems – Reporting, Public Notification and Recordkeeping.** This condition establishes recordkeeping, reporting and public notification requirements for your municipal sanitary sewer system and sanitary sewer overflows from your municipal sanitary sewer system. You do not have to report sanitary sewer overflows under § 122.41 (l) if the sanitary sewer overflows are reported under this section. (1) **Definition of Sanitary Sewer Overflow.** A sanitary sewer overflow (SSO) is an overflow, spill, release, or diversion of wastewater from a sanitary sewer system. SSOs do not include combined sewer overflows (CSOs) or other discharges from the combined portions of a combined sewer system. SSOs include:
- (i) Overflows or releases of wastewater that reach waters of the United States;
- (ii) Overflows or releases of wastewater that do not reach waters of the United States; and
- (iii) Wastewater backups into buildings that are caused by blockages or flow conditions in a sanitary sewer other than a building lateral. Wastewater

## Withdrawn SSO Rule

backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned is not an SSO.

- (2) **Immediate Notifications and Follow-Up Reports.** You must provide the following additional reports for sanitary sewer overflows (including overflows that do not reach waters of the United States) that may imminently and substantially endanger human health:
- (i) You must immediately notify the public, health agencies and other affected entities (e.g. public water systems) of overflows that may imminently and substantially endanger human health. The notification should be in accordance with your CMOM overflow emergency response plan (see paragraph (e) (2) (vii) of this section);
  - (ii) You must provide to the NPDES authority either an oral or electronic report as soon as practicable within 24 hours of the time you become aware of the overflow. The report must identify the location, estimated volume and receiving water, if any, of the overflow; and
  - (iii) You must provide to the NPDES authority within 5 days of the time you become aware of the overflow a written report that contains:
    - (A) The location of the overflow;
    - (B) The receiving water (if there is one);
    - (C) An estimate of the volume of the overflow;
    - (D) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
    - (E) The estimated date and time when the overflow began and stopped or will be stopped;
    - (F) The cause or suspected cause of the overflow;
    - (G) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps; and
    - (H) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.
  - (iv) The Director may waive the written report required by paragraph (g) (2) (iii) of this section 122.42 (g) (2) (iii) on a case-by-case basis.
- (3) **Discharge Monitoring Reports.** You must report sanitary sewer overflows that discharge to waters of the United States on the discharge monitoring report (DMR), including the following information:
- (i) The total number of system overflows that discharge to waters of the United States that occurred during the reporting period;
  - (ii) The number of locations at which sanitary sewer overflows that discharge to waters of the United States occurred during the reporting period that resulted from flows exceeding the capacity of the collection system;
  - (iii) The number of sanitary sewer overflows that discharge to waters of the United States that are unrelated to the capacity of the collection system that occurred during the reporting period; and
  - (iv) The number of locations at which sanitary sewer overflows that discharge to waters of the United States that occurred during the reporting period that are unrelated to the capacity of the collection system.

## Withdrawn SSO Rule

- (4) Annual Report.
- (i) You must prepare an annual report of all overflows in the sewer system, including overflows that do not discharge to waters of the United States. The annual report must include the date, the location of the overflow, any potentially affected receiving water, and the estimated volume of the overflow. The annual report may summarize information regarding overflows of less than approximately 1,000 gallons. You must provide the report to the Director and provide adequate notice to the public of the availability of the report.
  - (ii) System serving fewer than 10,000 people are not required to prepare an annual report if all DMRs for the preceding 12 months show no discharge to waters of the United States from overflows.
- (5) Recordkeeping. You, the permittee, must maintain a record of the following information for a period of at least 3 years from the date of the overflow or other recorded event:
- (i) For each sanitary sewer overflow, including overflows that did not discharge to waters of the United States, which occurred in your collection system or as a result of conditions in a portion of the collection system which you own or over which you have operational control:
    - (A) The location of the overflow and the receiving water if any;
    - (B) An estimate of the volume of the overflow;
    - (C) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
    - (D) The estimated date and time when the overflow began and when it stopped;
    - (E) The cause or suspected cause of the overflow; and
    - (F) Steps that have been and will be taken to prevent the overflow from recurring and a schedule for those steps.
  - (ii) Work orders which are associated with investigation of system problems related to sanitary sewer overflows;
  - (iii) A list and description of complaints from customers or others; and
  - (iv) Documentation of performance and implementation measures.
- (6) Additional Public Notification. You must notify the public of overflows, including overflows that do not discharge to waters of the United States, in areas where an overflow has a potential to affect human health. The criteria for notification should be developed in consultation with potentially affected entities. The notification should be in accordance with your CMOM overflow emergency response plan (see paragraph (e) (2) (vii) of this section.)”