

**SEWER SYSTEM MANAGEMENT PLAN
FOR THE
CITY OF HUNTINGTON BEACH**



Prepared by:

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April 2009



ABBREVIATIONS / ACRONYMS

AB	Assembly Bill
BAT	Best Available Technology
BC	Brown and Caldwell
BMP	Best Management Practice
CCTV	Closed-Circuit Television
CFR	Code of Federal Regulations
CIP	Capital Improvement Program
CM	Corrective Maintenance
CMMS	Computerized Maintenance Management System
CWEA	California Water Environment Association
ERP	Emergency Response Plan
FSE	Food Service Establishment
FOG	Fats, Oils, and Grease
GPS	Global Positioning System
I/I	Inflow / Infiltration
IERP	Integrated Emergency Response Plan
MRP	Monitoring and Reporting Program
O&M	Operation and Maintenance
OCHCA	Orange County Health Care Agency
OCSD	Orange County Sanitation District
OES	Office of Emergency Services
Order	State Water Resources Control Board (SWRCB), Order No. 2006-0003
Pd	Predictive Maintenance
PM	Preventative Maintenance
PMP	Preventative Maintenance Program
R&R	Rehabilitation and Replacement
RWQCB	Regional Water Quality Control Board
SOP	Standard Operating Procedure <u>or</u> Standard Maintenance Procedure
SSO	Sanitary Sewer Overflow and any sewer spill or overflow of sewage
SSMP	Sewer System Management Plan
WDR	Waste Discharge Requirements
WWTP	Wastewater Treatment Plant

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EXECUTIVE SUMMARY

This Sewer System Management Plan (SSMP) addresses the prevention and cleanup of sanitary sewer overflows (SSOs). All sewage collection agencies in the State of California are required to comply with the "State Water Resources Control Board (SWRCB), Order No. 2006-0003" (Order) Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The purpose of the Order is to prevent SSOs, and to provide a plan and schedule for measures to be implemented to prevent SSOs, as well as measures to effectively clean up and report the spills.

The Order requires that we properly fund, manage, operate, and maintain the sewage collection system for which we are responsible. We must use trained staff (and/or contractors) possessing adequate knowledge, skills, and abilities to complete necessary collection system work.

The essence of this Order is as follows:

- Agencies must proactively manage the systems they operate in a way that prevents spills.
- In the event of a spill, lack of funds, failure to acquire information that could have been collected, failure to apply the latest practicable technology, poorly trained staff, or ignorance should not be a defense.
- Agencies must fully comply with this Order, and failures could bring about SWRCB action, regardless of whether or not a spill has occurred.

This SSMP report is organized to correspond to the sections of the Order. The report consists of 11 Sections. In general, each chapter begins with a summary of Order requirements, followed by these subsections:

- Compliance Summary – A description of how compliance was achieved
- Compliance Documents – A listing of source documents that support compliance and their locations

In 2005, the City prepared an SSMP plan in compliance with Santa Ana Regional Water Quality Control Board Order No. R8-2002-0014. That order was subsequently rescinded on December 1, 2006 by Order R8-2002-0014. This document has been updated to bring the City's SSMP in compliance with the State Order.



PROHIBITIONS AND PROVISIONS

Prohibitions (Section C of the Order)

1. *Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.*
2. *Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.*

Provisions (Section D of the Order)

1. *The enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.*
2. *It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:*
 - i. *Interpreted or applied in a manner inconsistent with the Federal clean Water Act, or supersede a more specific or more stringent state of federal requirement in an existing permit, regulation, or administrative/judicial order of Consent Decree;*
 - ii. *Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water code;*
 - iii. *Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for sanitary sewer system, authorized under the Clean Water Act or California Water Code; or*
 - iv. *Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water board.*
2. *Discharges Caused by Other Factors – For SSOs other than those covered under these provisions, the permittee may establish an affirmative defense to an action brought for noncompliance if the discharger demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:*
 - i. *The permittee can identify the cause or likely 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, preventive maintenance; or installation of adequate backup equipment; and

- iv. The permittee took all reasonable steps to stop, and mitigate the impact of, the discharge as soon as possible.*
- 3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.*
- 4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains, flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.*
- 5. All SSOs must be reported in accordance with Section G of the general WDRs.*
- 6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 1327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:*
 - i. The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;*
 - ii. The Enrollee can identify the cause of likely cause of the discharge event;*
 - iii. There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.*
 - iv. The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;*
 - v. The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:*
 - Proper management, operation and maintenance;*

- *Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);*
 - *Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);*
 - *Installation of adequate backup equipment; and*
 - *Inflow and infiltration prevention and control to the extent practicable.*
- vi. *The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.*
- vii. *The enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.*
7. *When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.*
8. *The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained an possess adequate knowledge, skills, and abilities.*
9. *the Enrollee shall allocate adequate resources for the operation, maintenance and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.*
10. *The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.*
11. *The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.*

12. *In accordance with the California business and Professions Code sections 6735, 7835, and 7835.1 all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professional competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professionals signature and stamp.*
13. *The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify what that element is not applicable. The SSMP must be approved by the deadline listed in the SSMP Time Schedule below.*

The elements of the SSMP are elaborated on in the Sections following.

- i. Goals
- ii. Organization
- iii. Legal Authority
- iv. Operation and Maintenance Program
- v. Design and Performance Provisions
- vi. Overflow Emergency Response Plan
- vii. FOG Control Program
- viii. System Evaluation and Capacity Assurance Plan
- ix. Monitoring, Measurement, and Program Modifications
- x. SSMP Program Audits
- xi. Communication Program

SECTION 1 – GOALS

The goal of the SSMP is to provide a plan and schedule to properly manage, operate and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

The City of Huntington Beach completed its first SSMP in 2005 in compliance with the “California Regional Water Quality Board (RWQCB), Santa Ana Region, Order No. R8-2002-0014” (Order) on General Waste Discharge Requirements for Sewage Collection Agencies in Orange County within the Santa Ana Region. Many elements of the SSMP were already in practice and continue to date. However the formalization of the SSMP has resulted in a heightened awareness by both City staff as well as the public. This awareness has resulted in a decrease in SSO’s to date.

About This Document

The City of Huntington Beach has prepared this SSMP to ensure compliance with the State Order. The SSMP provides a general description of how we comply with the various provisions of the Order and provides references to supporting documents. The Appendices of the SSMP contains specific information and support documents. Some support materials, such as large format drawings, relational databases, and voluminous documents may not be physically included in the SSMP. In these cases, a reference will be provided within the SSMP that indicates the type, owner, and location of these support materials.

A copy of the “State Water Resources Control Board (SWRCB), Order No. 2006-0003” Statewide General Waste Discharge Requirements for Sanitary Sewer Systems is located in **Appendix A.**



SECTION 2 – ORGANIZATION

The SSMP must identify:

- a. *The name of the responsible or authorized representative as described in Section J of this Order*

The authorized representative for the City of Huntington Beach is **Travis K. Hopkins, PE**, Director of Public Works.

- b. *The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify line of authority through an organization chart or similar document with a narrative explanation; and*

Travis K. Hopkins, PE, Director of Public Works – (714) 374-5348 This position assumes general responsibility for the personnel and activities associated with implementation of the SSMP. The City Engineer and Utilities Manager report directly to the Director of Public Works.

Engineering

Tony Olmos, City Engineer – (714) 375-5077 This position is responsible for the design, construction inspection and enforcement staff. The Principal Civil Engineer (Environmental) reports directly to the City Engineer

Terri Elliott, Principal Civil Engineer – (714) 536-5580

This position is responsible for the day-to-day management of the SSMP program. Two Administrative Environmental Specialists report directly to the Principal Civil Engineer.

Jim Merid, Administrative Environmental Specialist – (714) 374-1548

This position is responsible for inspection and education outreach and will have direct contact with the FSEs.

Judy Keir, Administrative Environmental Specialist – (714) 375-8445

This position is responsible for inspection and education outreach and will have direct contact with the FSEs.

Maintenance

Howard Johnson, Utilities Manager – (714) 536-5503 This position is responsible for maintenance of the sewer, storm drain and water system as well as monthly reporting of SSOs. The Supervisor (Sewer/Storm Drains) reports directly to the Utilities Manager.

Chris Gray, Supervisor - (714) 375-5040 This position is responsible for the day-to-day management of the wastewater operations including the Crewleader and subordinate activities.

Mark Birchfield, Crewleader - (714) 375-5041

This position is responsible for overseeing the maintenance worker activities and response to and immediate reporting of SSOs.

Ronn Rathbun, Lead Worker - (714) 374-1706

This position is responsible for overseeing the maintenance worker activities of the sewer lift stations and response to and immediate reporting of SSOs.

Enrique Lemus, Lead Worker - (714) 375-5054

This position is responsible for overseeing the maintenance worker activities of the sewer line cleaning and response to and immediate reporting of SSOs.

- c. *The chain of communications for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water board, and/or State Office of Emergency services (OES)).*

During business hours concerns of SSO's are received by the Utilities Department. At such time, the information is transferred to the Wastewater Supervisor, the Wastewater Crew Leader or one of two Wastewater Lead Workers and a crew is dispatched to respond to the spill. The Wastewater Supervisor, the Wastewater Crew Leader or one of two Wastewater Lead Workers will be responsible for reporting SSOs to the State and Regional Water board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water board, and/or California Emergency Management Agency (OES)).

After hours SSO concerns are received by the Police Department and they notify the wastewater stand-by personnel and a crew is dispatched to respond to the spill. The lead person on the stand-by crew will be responsible for reporting the SSO, the day of the spill by telephone, to the State and Regional Water board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water board, and/or California Emergency Management Agency (OES)). The next business day the Wastewater Supervisor, the Wastewater Crew Leader or one of two Wastewater Lead Workers will do a written report and will fax the report to the Regional Water Quality Control Board and the County of Orange, Health Care Agency. They will also report the spill to the CIWQS web site.

SECTION 3 -- LEGAL AUTHORITY

Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- a. Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);*

Resolution No. 2003-52 adopts the City's Sewer Master Plan, which includes probable locations of infiltration for identification of capital improvement projects. In addition, the pipe capacity criteria have been modified to allow for adequate capacity for infiltration.

Municipal Code 14.36.030 requires submission of plans and specifications for new sewer mains or connections be approved by the Director of Public Works. This would prohibit any new illicit connections. Municipal Code 14.24.030, as well as, Section 306.0 of the Uniform Plumbing Code, as adopted by Municipal Code 17.44, prohibits discharge of inflow other than sewage, which would cover any existing illicit connections.

- b. Require that sewers and connections be properly designed and constructed;*

Municipal Code 14.44.020 requires submission of plans and specifications for new sewer mains or connections be approved by the Director of Public Works. In addition, Municipal Code 12.10 adopts the Standard Specifications for Public Works Construction together with adopted standard plans of the Department of Public Works, as well as the Uniform Plumbing Code, as adopted by Municipal Code 17.44, outline design criteria and construction methods.

- c. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;*

In 2008, the City took ownership of the sewer laterals (that portion within the Public Right-of-Way). As laterals are repaired, replaced, or rehabilitated, clean-outs are being added at the Right-of-Way to allow for easier access.

- d. Limit the discharge of fats, oils, and greases and other debris that may cause blockages, and*

In 2004, the City adopted a FOG ordinance, Municipal Code 14.56 and FOG Control Program to address this element. Previous to that and in addition to; Municipal Code 14.24.035 (f) limits fats, oils, and grease, to 200 parts per million. Municipal Code 17.44 adopts the Uniform Plumbing Code, which requires the installation of a grease control device as required. Further, Section 306 of the Uniform Plumbing Code prohibits grease and other debris from entering the sewer system.

e. Enforce any violation of its sewer ordinances.

As adopted, the FOG ordinance gives the authority to the inspector to cite FSE's that are found to be in violation of the FOG ordinance. A Notice of Non-Compliance (formal written warning) is issued for minor violations and Administrative Civil Citations ranging from \$100 to \$500 are issued for more severe or repeat violations.

3.1 Compliance Documents

The aforementioned Municipal Codes are included in **Appendix B**, and can also be accessed on the City's website at the following link:

http://www.surfcity-hb.org/Government/charter_codes/municipal_code.cfm

The FOG Control Program is included in **Appendix C**.

SECTION 4 – OPERATIONS AND MAINTENANCE PROGRAM

The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- a. *Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities:*

The City has been proactive in implementing a Geographic Information System (GIS) beginning in the late 1990's. The sewer and storm drain infrastructure were fully populated in the early part of this decade. At least two GIS staff are dedicated to keeping the GIS data base updated to reflect any changes. Maps of these infrastructure are accessible to staff in both hard copy as well as through a GIS portal. In addition, in 2008, all record drawings were scanned and are readily accessible to City staff.

- b. *Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders:*

In 2003, the City documented its preventative maintenance program entitled, "City of Huntington Beach, 2003 WDR Preventative Maintenance Program". The Plans was updated in 2009.

- c. *Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of man holes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan:*

From a non-capacity related program, the City began rehabilitating its gravity sewer system by trenchless methods in 1999. The original priority locations were those adjacent to the ocean and harbor, which have now been completed. The focus to date will now be on identifying additional pipe segments through CCTV, beginning with the oldest parts of the City. To date approximately 74 miles of sewer mains and the associated manholes have been rehabilitated.

- d. *Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained: and*

Although the City does not require certifications as a prerequisite for employment, it is highly encouraged. Fourteen employees currently hold certificates in Collection System Maintenance from the California Water Environment Association. One employee also holds a certificate as a Plant Maintenance Technologist and one employee also holds a certificate as a Mechanical Technologist from the California Water environment Association.

- e. Provide equipment and replacement part inventories, including identification of critical replacement parts.*

This information is contained in the aforementioned "City of Huntington Beach, 2003 WDR Preventative Maintenance Program"

4.1 Compliance Documents. The documents supporting compliance with the requirements for Operations and Maintenance Program are as follows:

City employees currently have access to "GIS Surfer" which allows the review of pertinent infrastructure in the GIS database. At least two GIS analysts are located at the Utilities Yard.

The Preventative Maintenance Program is located in **Appendix D**. Training certificates are located in **Appendix E**.

SECTION 5 – DESIGN AND PERFORMANCE PROVISIONS

- a. *Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and*
- b. *Procedures and standards for inspecting and testing the installation of new sewers, pumps , and other appurtenances and for rehabilitation and repair projects.*

The City utilizes the “Standard Specifications for Public Works Construction” or “Greenbook” specifications for general construction and inspection of sewer facilities. In addition, supplemental City approved design criteria, specifications and standard drawings have been produced by City staff.

5.1 Compliance Documents

The “Greenbook” is a readily available document, which is utilized by the majority of public agencies in Southern California and throughout the United States. Due to the size and yearly update, it is not included in this Plan. The City’s supplemental specifications to the “Greenbook” are in digital format and can be provided upon request to the City’s Engineering Division. The City standard drawings can be accessed on the City’s website at the following link:

http://www.surfcity-hb.org/Government/Departments/Public_Works/



SECTION 6 -- OVERFLOW EMERGENCY RESPONSE PLAN

Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- a. Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;*
- b. A program to ensure an appropriate response to all overflows;*
- c. Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional water boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs of NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;*
- d. Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;*
- e. Procedure to address emergency operations, such as traffic and crowd control and other necessary response activities; and*
- f. A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.*

In 2002, the City developed an SSO Emergency Response Plan, to meet the aforementioned criteria. All public spills and any known private spills are reported via the CIWQS internet reporting program. In addition the County of Orange, Health Care Agency, the California Emergency Management Agency and the Regional Water Quality Control Board and if the spill enters a county channel the Public Facilities & Resources Department are all notified by telephone. The County of Orange, Health Care Agency and the Regional Water Quality Control Board are also faxed a copy of the spill report.

6.1 Compliance Documents

The Response Plan is documented as Administrative Regulation AR808, a copy of which is included in **Appendix F**.



SECTION 7 – FOG CONTROL PROGRAM

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- a. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;*
- b. A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;*
- c. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- d. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices maintenance requirements, BMP requirements, record keeping and reporting requirements.*
- e. Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;;*
- f. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and*
- g. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.*

In 2004, the City developed a Fats, Oils, and Grease Control Program to address the elements described above. The City also contributed financially to the Orange County Sanitation District "In Plant FOG Impact Study" to identify disposal options for FOG. In addition, the City has developed a Best Management Practices Training Manual for Food Service Establishments (FSEs).

7.1 Compliance Documents

The FOG Control Plan is included in **Appendix C**, while the FOG Impact Study is included in **Appendix G**. The Best Management Practices Training Manual for Food Service Establishments is included in **Appendix H**.

(17)

(18)

(19)

SECTION 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minim, the plan must include:

- a. Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. 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, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;*
- b. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and*
- c. Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternative analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.*
- d. Schedule: The enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a) – (c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.*

The City's Sewer Master Plan was updated in 2003. As a result, Chapter 14.36 of the City's Municipal Code was updated to increase the sewer connection fee commensurate with the necessary capital improvements.

The Master Plan identified possible deficiencies for further site specific evaluation in approximately nine miles (or less than 3%) of the entire gravity system. In 2008, the City completed an evaluation of those segments that exceeded the design criteria for "new" sewers. It was found that in all but two cases, the actual flow in the pipes was less than identified in the Sewer Master Plan's desktop analysis. One segment, which exceeds the "design" capacity but does not flow full at peak discharge, is identified to be re-evaluated as part of the City's Beach/Edinger Corridor Specific Plan. The other segment is located immediately downstream of the Edinger Lift Station. Modifications to that lift station are underway to limit the amount of flow discharged to this segment.

The City's 29 sewer lift stations were also analyzed. Based on this analysis and with input from the City's maintenance staff, a priority list has been established for rehabilitation and/or

replacement of these lift stations. Since adoption of the Sewer Master Plan, three lift stations have been rebuilt with two additional lift stations under construction as of this writing. The City has also programmed the rehabilitation/replacement of one sewer lift station per year moving forward.

8.1 Compliance Documents

The City's 2003 Sewer Master Plan, prepared by Kennedy-Jenks Consultants in 2003 can be found in **Appendix I**. The Sewer Capacity Analysis, prepared by AKM Consulting Engineers in 2009 can be found in **Appendix J**. The Sewer Lift Station Priority List, which is a "living" list, subject to change, can be found in **Appendix K**.

SECTION 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The Enrollee shall:

- a. Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;*
- b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;*
- c. Assess the success of the preventative maintenance program;*
- d. Update program elements, as appropriate, based on monitoring or performance evaluations; and*
- e. Identify and illustrate SSO trends, including: frequency, location, and volume.*

9.1 Compliance Summary

As the SSMP is a “living document”, it is subject to change as standards, procedures, technology, and system evaluation or condition dictate. The City intends to adhere to the aforementioned. Changes will be made as necessary to continually improve this document.



CHAPTER 10 – SSMP PROGRAM AUDITS

As a part of the SSMP, the permittee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluation the effectiveness of the SSMP and the Enrollees compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

10.1 Compliance Summary

The City intends to conduct periodic audits of the SSMP.



CHAPTER 11 – COMMUNICATIONS

The Enrollee shall communicate on a regular basis with the public on the development, implementation and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

11.1 Compliance Summary

The City intends to adhere to this requirement through its education outreach program. Outreach includes FSEs, the City's Public Works Commission, City Council, and the general public through periodic ad campaigns.

9.2 Compliance Documents

The FOG Control Plan is included in **Appendix C**, while the Best Management Practices Training Manual for Food Service Establishments is included in **Appendix H**. Examples of Public Outreach are included in **Appendix L**.



7/18

T. HOPKINS, PE
T. BROWNSAND, PE

Council/Agency Meeting Held: <u>7/16/2007</u>	<i>[Signature]</i> City Clerk's Signature
Deferred/Continued to: _____	
<input checked="" type="checkbox"/> Approved <u>7-0</u> <input type="checkbox"/> Conditionally Approved <input type="checkbox"/> Denied	
Council Meeting Date: <u>7/16/2007</u>	Department ID Number: <u>07-042</u>

**CITY OF HUNTINGTON BEACH
REQUEST FOR CITY COUNCIL ACTION**

SUBMITTED TO: HONORABLE MAYOR AND CITY COUNCIL MEMBERS

SUBMITTED BY: *[Signature]*
PENELOPE CULBRETH-GRAFT, DPA, CITY ADMINISTRATOR

PREPARED BY: TRAVIS HOPKINS, PE, ACTING DIRECTOR OF PUBLIC WORKS *[Signature]*
ENGINEERING

SUBJECT: Approve the Sanitary Sewer Management Plan Development Plan and Schedule

Statement of Issue, Funding Source, Recommended Action, Alternative Action(s), Analysis, Environmental Status, Attachment(s)

Statement of Issue: The State Water Resources Control Board Order No. 2006-0003 requires local governing board approval of the Sanitary Sewer Management Plan (SSMP) Development Plan and Schedule.

Funding Source: No funding is necessary for this action.

Recommended Action: **Motion to:** Approve the General Waste Discharge Requirements (WDRs) Sewer System Management Plan Development Plan and Schedule dated September 30, 2002.

Alternative Action(s): Do not approve the General Waste Discharge Requirements (WDRs) Sewer System Management Plan Development Plan and Schedule dated September 30, 2002 and direct staff on how to proceed.

E-6

REQUEST FOR CITY COUNCIL ACTION

MEETING DATE: 7/16/2007

DEPARTMENT ID NUMBER: 07-042

Analysis: In 2002, the Santa Ana Regional Water Quality Control Board (RWQCB) issued Order No. R8-2002-0014 which required the City to develop several programs to prevent sanitary sewer overflows. The final deliverable to meet this Order was the development of a Sanitary Sewer Management Plan (SSMP) which was completed on September 30, 2005. An intermediate deliverable, the SSMP "Development Plan and Schedule," which described how the City would meet the various other deliverables and their associated due dates, was also prepared and submitted to the RWQCB on September 30, 2002.

In 2006, the State Water Resources Control Board issued Order No. 2006-0003, which is substantially verbatim to the RWQCB Order, to cover the entire state. By virtue of the City's compliance with the RWQCB Order, only minimal effort is required to meet the requirements as stipulated in the State's Order. The State Order requires that the SSMP Development Plan and Schedule be approved by the local governing board, while the RWQCB Order did not. Therefore, the previously prepared Development Plan and Schedule is being submitted for approval to meet this requirement.

Strategic Plan Goal:

(I-1) Improve the City's plan for funding and completing infrastructure needs, and develop strategies for resolving crucial infrastructure problems to preserve the physical foundation of the community and enable the community's value to grow.

Public Works Commission Action: No action necessary.

Environmental Status: Not applicable

Attachment(s):

City Clerk's Page Number	No.	Description
	1.	General Waste Discharge Requirements Sewer Management Plan Development Plan and Schedule

ATTACHMENT #1

RWQCB, SANTA ANA REGION
ORDER NO. R8-2002-0014

GENERAL WASTE DISCHARGE REQUIREMENTS (WDRs)
SEWER SYSTEM MANAGEMENT PLAN

DEVELOPMENT PLAN AND SCHEDULE

SEPTEMBER 30, 2002

Prepared By:

CITY OF HUNTINGTON BEACH

INTRODUCTION

The table below has been prepared to translate the Waste Discharge Requirements (WDRs) for Sewers (Order No. R8-2002-0014), into a list of deliverables to facilitate understanding of the requirements. This document is meant to serve as a comprehensive status checklist for Departments within the City of Huntington Beach, which are affected by the conditions of this Order.

WDR Reference	Deliverables	Notes	Due Dates
<p>C. PROVISIONS</p> <p>2. Discharges Caused by Severe Natural Conditions</p> <p>The Regional Board may take enforcement action against the permittee for any sanitary sewer system discharge caused by natural conditions, unless the permittee demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:</p> <p>(i) The discharge was caused by severe natural conditions (such as hurricanes, tornadoes, flooding, earthquakes, tsunamis, and other similar natural conditions);</p> <p>(ii) There were no feasible alternatives to the discharge, such as retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, or an 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, adequate back-up equipment or should have reduced inflow and infiltration. This provision is also not satisfied if the agency does not undergo a periodic or continuing planning to identify and correct problems.</p>	<ul style="list-style-type: none"> ✓ SSO Emergency Response Plan ✓ Sewer Master Plan, which identifies redundant systems and potential areas of Inflow/Infiltration. 	<p>City enacted Administrative Regulation 808 effective January 1, 2002, which describes the Sanitary Sewer Overflow Response Procedures.</p> <p>In the Summer of 2002, the City updated the Sewer Master Plan including an I/I study, which identifies potentially deficient sewer infrastructure. Each component will be further evaluated as part of our Capital Improvement Plan.</p>	<p>SSO Emergency Response Plan due by January 1, 2003</p> <p>Capacity Evaluation due by July 30, 2005</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>3. Discharges Caused by Other Factors</p> <p>For SSOs other than those covered under this section, the permittee may establish an affirmative defense to an action brought for non-compliance if the permittee demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that:</p> <ul style="list-style-type: none"> (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 at OCSD two regional treatment plants 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; and (iv) The permittee took all reasonable steps to stop, and mitigate the impact of, the discharge as soon as possible. 	<p><input type="checkbox"/> Sewer System Management Plan (SSMP)</p>	<p>Through adherence to the WDR, the City can establish an affirmative response.</p>	<p>SSMP completed by September 30, 2005</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>4. Burden of Proof</p> <p>In any enforcement proceeding, the permittee has the burden of proof to establish that the criteria in this section have been met.</p> <p>5. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order.</p>		No Action Required	
<p>6. Upon reduction, loss, or failure of the sanitary sewer system resulting in a sanitary sewer overflow, the discharger shall, to the extent necessary to maintain compliance with this Order, take any necessary remedial action to:</p> <ol style="list-style-type: none"> (1) Control or limit the volume of sewage discharged, (2) Terminate the sewage discharge as rapidly as possible, and (3) Recover as much of the sewage discharged as possible for proper disposal, including any wash down water. <p>The dischargers shall implement all remedial actions to the extent they may be applicable to the discharge, including the following:</p> <ol style="list-style-type: none"> a. Interception and rerouting of sewage flows around the sewage line failure; b. Vacuum truck recovery of sanitary sewer overflows and wash down water; c. Cleanup of debris of sewage origin at the overflow site. 	<p>✓ SSO Emergency Response Plan</p>	<p>City enacted Administrative Regulation 808 effective January 1, 2002, which describes the Sanitary Sewer Overflow Response Procedures.</p>	<p>SSO Emergency Response Plan due by January 1, 2003</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>7. The discharger shall properly fund, manage, operate and maintain, with adequately trained staff and/or contractors possessing adequate knowledge skills and abilities as demonstrated through a validated program at all times, all parts of the sewage collection system owned and/or operated by the discharger.</p>	<p><input type="checkbox"/> Sewer System Management Plan</p>	<p>Funding and training to be reported in the SSMP.</p> <p>In the Summer of 2001, City Ordinance 3504 was adopted to implement a Sewer Service User Charge for the maintenance and repair of Sewer Infrastructure.</p> <p>8 out of 10 City sewer maintenance workers hold certifications for wastewater collection systems through CWEA.</p>	<p>SSMP completed by September 30, 2005</p>
<p>8. The discharger shall provide adequate capacity to convey base flows and peak flows, including wet weather related events to the minimum design criteria as defined in the dischargers System Evaluation and Capacity Assurance Plan, for all parts of the collection system owned or operated by the discharger.</p>	<p><input checked="" type="checkbox"/> Sewer Master Plan, which evaluates capacity.</p>	<p>In the Summer of 2002, the City updated the Sewer Master Plan including an I/I study, which identifies potentially deficient sewer infrastructure. Each component will be further evaluated as part of our Capital Improvement Plan.</p>	<p>Capacity Evaluation due by July 30, 2005</p>
<p>9. The discharger shall take all feasible steps to stop, and mitigate the impact of, sanitary sewer overflows in portions of the collection system owned or operated by the discharger.</p>	<p><input checked="" type="checkbox"/> SSO Emergency Response Plan</p>	<p>City enacted Administrative Regulation 808 effective January 1, 2002, which describes the Sanitary Sewer Overflow Response Procedures.</p>	<p>SSO Emergency Response Plan due by January 1, 2003</p>
<p>10. The discharger shall provide notification to the OCHCA and the Regional Board so that they can notify parties with a reasonable potential for exposure to pollutants associated with the SSO.</p>	<p><input checked="" type="checkbox"/> SSO Emergency Response Plan</p>	<p>City enacted Administrative Regulation 808 effective January 1, 2002, which describes the Sanitary Sewer Overflow Response Procedures.</p>	<p>SSO Emergency Response Plan due by January 1, 2003</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>11. The discharger shall develop and implement a written plan, a Sewer System Management Plan (SSMP), for compliance with these waste discharge requirements and make it available to any member of the public upon request in writing.</p>	<p><input type="checkbox"/> Sewer System Management Plan</p>	<p>Engineering staff will be responsible to gather the required information and compile the report. A Draft SSMP with available information shall be prepared by June 1, 2003 or sooner.</p>	<p>SSMP completed by September 30, 2005</p>
<p>12. The essential elements of the SSMP are specified below. If the discharger believes that any element of this section is not appropriate or applicable for the SSMP program, the program does not need to address it, but the SSMP must explain why that element is not applicable. The Regional Board will consider the quality of the SSMP, its implementation and effectiveness in any relevant enforcement action, including but not limited to any enforcement action for violation of the Clean Water Act, the Basin Plan prohibition, or these waste discharge requirements. The SSMP must include the following components, with the exception of non-applicable components, as discussed above:</p>	<p><input type="checkbox"/> Sewer System Management Plan</p>	<p>The City currently has in place the majority of the components required. Those components, which are not complete, shall be noted below with anticipated time frame for completion.</p>	<p>SSMP completed by September 30, 2005</p>
<p>SEWER SYSTEM MANAGEMENT PLAN (SSMP)</p>			
<p>(i) Goals. The main goal of the SSMP is to prevent SSOs and to provide a plan and schedule for measures to be implemented to prevent SSOs.</p>	<p><input checked="" type="checkbox"/> Prepare an SSMP Development Plan and Schedule</p>	<p>This document</p>	<p>SSMP Development Plan due by September 30, 2002</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>(ii) Organization. The SSMP must identify:</p> <p>(A) Administrative and maintenance positions responsible for implementing measures in the SSMP program, including lines of authority by organization chart or similar document; and</p> <p>(B) The chain of communication for reporting SSOs, from receipt of a complaint or other information including the person responsible for reporting SSOs to the Regional Water Quality Control Board, Orange County Health Care Agency, and State Office of Emergency Services (OES) if the discharge is 1,000 gallons or larger.</p>	<p><input type="checkbox"/> Overall organizational chart, including governing body</p> <p><input checked="" type="checkbox"/> SSO Emergency Response Plan</p>	<p>Engineering Staff to prepare Org. Chart by January 1, 2003</p> <p>SSO Emergency Response Plan details chain of communication.</p>	<p>SSMP completed by September 30, 2005</p> <p>SSO Emergency Response Plan due by January 1, 2003</p>
<p>(iii) Legal Authority. The SSMP shall include legal authority, through sewer use ordinances, service agreements or other legally binding documents, to:</p> <p>(A) Control infiltration and connections from inflow sources;</p> <p>(B) Require that sewers and connections be properly designed and constructed;</p> <p>(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);</p> <p>(D) Limit fats and greases and other debris, which may cause blockages in the sewage collection system.</p> <p>(E) Implement the general and specific prohibitions of the national pretreatment program under 40 CFR 403.5.</p>	<p><input checked="" type="checkbox"/> Sewer use ordinance that defines and controls discharges to the collection system, connections from inflow sources such as; sump pumps, roof leaders, yard and starwell drains or any other materials that adversely affects the performance of the collection system.</p> <p><input checked="" type="checkbox"/> Design and construction specifications based on current engineering and construction practices</p> <p><input checked="" type="checkbox"/> City Specifications, which supplement the Greenbook.</p> <p><input type="checkbox"/> A grease control program for commercial, industrial, and institutional users that combines source and field control to reduce SSOs caused by the discharge of FOG to the collection system.</p> <p><input type="checkbox"/> Statement to be added identifying the City as a collection Agency with pretreatment by the OCSD.</p>	<p>Municipal Code 14.36 requires the review and approval by the City to insure proper use.</p> <p>Municipal Code 14.36 requires the review and approval by the City to insure proper design and construction methods.</p> <p>All permitted sewer construction is inspected by City Inspectors.</p> <p>City is currently participating both monetarily and as a member of the FOG Steering Committee. (See item viii)</p>	<p>Legal Authority due by July 30, 2004</p> <p>FOG Control Program due by 12/30/04</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>(iv) Measures and Activities: In order to provide an adequate and appropriate SSO reduction plan, the SSMP must address the elements listed below that are appropriate and applicable to the dischargers system and identify the person or position in the organization responsible for each element:</p> <p>(A) Provide adequate operation and maintenance of facilities and equipment;</p> <p>(B) Maintain an up-to-date map of the collection system showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and stormwater conveyance facilities;</p> <p>(C) Maintain relevant information to establish and prioritize appropriate SSMP 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,</p> <p>(D) 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;</p> <p>(E) Routine preventive operation and maintenance activities by staff and contractors; including a system for scheduling regular maintenance and cleaning of the collection system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system of tracking work</p>	<p><input type="checkbox"/> List of dedicated staff and material resources (equipment and spare parts) needed to operate and maintain the system assets so the intended function (conveyance capacity) is maintained.</p> <p><input checked="" type="checkbox"/> Complete and accurate set of maps of the collection system that is available for management, operation and maintenance of the collection system and an established process to maintain and update map of the collection system including, all gravity lines and force-mains, manholes, pumping facilities, siphons and other appurtenances.</p> <p><input checked="" type="checkbox"/> Update the Sewer Master Plan to identify any capacity issues with special attention given to that infrastructure in close proximity to sensitive environs.</p> <p><input type="checkbox"/> A proactive maintenance program that consists of a balance of planned and scheduled preventive/predictive maintenance (pumping station electrical and mechanical systems, hydraulic and mechanical cleaning, inspection and condition assessment, Rights-of-Way and Easements, etc.) and corrective maintenance by staff and contractors.</p> <p><input checked="" type="checkbox"/> Capacity management program that provides an accurate, current capacity analysis of the system and compares to capacity needs.</p>	<p>Under the direction of the current Maintenance Operations Manager, maintenance staff currently maintains an org chart with duties and a current list of equipment and spare parts. (Submit to Engineering by January 1, 2003)</p> <p>The City currently maintains maps of its collection system through its GIS system under the direction of the Deputy Director of Public Works and the Engineering staff. Digital Maps currently available to Engineering Staff with hard copies to Maintenance Staff.</p> <p>In the Summer of 2002, the City updated its Sewer Master Plan and will evaluate priorities accordingly.</p> <p>Maintenance staff currently adheres to a planned maintenance schedule. (Submit to Engineering by January 1, 2003)</p> <p>In the Summer of 2002, the City updated its Sewer Master Plan, which includes potential capacity deficiencies. (Engineering Staff to prepare a priority list by June 1, 2003 or sooner)</p>	<p>Preventive Maintenance Program due by 06/15/03</p> <p>Capacity Evaluation Program due by 07/30/05</p> <p>Sewer Rehab. Plan due by 09/30/05.</p>

WDR Reference	Deliverables	Notes	Duc Dates
<p>orders and assessing the success of the PM program;</p> <p>(F) Establish a program to assess the current capacity of the collection system owned by the discharger or where the discharger has operational control; including diversions of urban runoff to the sewer system and control of infiltration and intrusion during both wet weather events and dry weather periods;</p> <p>(G) Identify and prioritize structural deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. This shall include a rehabilitation plan including schedules for the entire system. As with the PM program, sewer rehabilitation and replacement is crucial for the prevention of spills. Among the provisions that should be specified in this section is the need to direct rehabilitation and replacement at sewer pipes which are at risk of collapse or prone to more frequent blockages due to pipe defects. The program should also include regular visual and TV inspection of sewer pipes and a system for assessing and ranking the condition of sewer pipes. Finally, the rehabilitation and replacement plan should include a financial plan that properly manages and protects the infrastructure assets;</p> <p>(H) Provide training on a regular basis for staff in collection system O&M and monitoring and determine if contractors' staff are appropriately trained;</p>	<p><input type="checkbox"/> System condition assessment, based on priorities established through a structured asset management plan. Inventory of defects that require periodic preventive maintenance to maintain capacity. Prioritized list of defects been that require spot repair, rehabilitation or replacement to restore capacity. Program for short and long term repair, rehabilitation or replacement.</p> <p><input checked="" type="checkbox"/> Analysis of financial resources necessary to operate, maintain and execute short and long term repair, rehabilitation or replacement program identified and funded.</p> <p><input type="checkbox"/> Training program for City Operations and Maintenance staff and assurance of training by the contractors engaged by the city to for performance of O&M functions.</p>	<p>City has video inspected over 40% of its System. Beginning October 1, 2002, our video inspection program will be resumed in order to provide for a Sewer Rehabilitation Plan to be prepared by Engineering Staff.</p> <p>By Ordinance 3504, the City must annually evaluate its Sewer Service User Charge.</p> <p>Operations Manager shall investigate requirement of Certification for existing and future employees. (Recommendation by June 1, 2003)</p>	

WDR Reference	Deliverables	Notes	Due Dates
<p>(I) Provide equipment and replacement parts inventories including identification of critical replacement parts.</p> <p>(J) Establish an implementation plan and schedule for a public education outreach program that promotes proper disposal of grease and fats.</p> <p>(K) In accordance with County of Orange's Drainage Area Management Plan, establish a plan for responding to SSOs from private property that discharge to public right of ways and storm drains, to prevent discharges from SSOs to surface waters and storm drains; and</p> <p>(L) Develop a plan and a schedule for providing an analysis of alternative methods of disposal for grease and fats, and an implementation plan and schedule for providing adequate disposal capacity for grease and fats generated within the sewer system service area. This plan shall include an evaluation of the feasibility of using sludge digesters at the OCSD treatment plant for grease disposal and treatment, recycling, and rendering, and other disposal alternatives.</p>	<p><input type="checkbox"/> Inventory of replacement parts.</p> <p><input type="checkbox"/> Public education program focused on reducing residential disposal of FOG</p> <p><input checked="" type="checkbox"/> Established procedures to investigate (service request) and assist in the mitigation of discharges from private property.</p> <p><input type="checkbox"/> FOG program to monitor the maintenance of commercial, industrial, and institutional source control systems (grease interceptors, traps, skimmers,) maintenance and disposal of FOG from these sources.</p>	<p>Maintenance Staff to provide Inventory to Engineering by January 1, 2003</p> <p>Engineering Staff to coordinate public outreach with recommendation by June 1, 2003.</p> <p>SSO Emergency Response Plan currently details private property response.</p> <p>City is currently participating both monetarily and as a member of the FOG Steering Committee, and will incorporate the tools developed from the study to establish appropriate control methods to reduce FOG in the collection system (See item viii.)</p>	
<p>(V) Design and Performance Provisions:</p> <p>(A) Develop design and construction standards and specifications for the installation of new sewers, pump stations and other appurtenances; and for rehabilitation and repair of existing sewer systems; and</p> <p>(B) Develop procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and</p>	<p>Ensure the following:</p> <p><input checked="" type="checkbox"/> Design and construction specifications as well as inspection, based on current engineering and construction practices</p>	<p>The City currently maintains Supplemental Specifications to the "Standard Specifications for Public Works Construction" or better known as the "Green Book" as well as Design standards for its Sewer Infrastructure.</p>	

WDR Reference	Deliverables	Notes	Due Dates
repair projects. (vi) Monitoring, Measurement and Program Modifications (A) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP; (B) Update program elements, as appropriate, based on monitoring or performance evaluations; and (C) Modify the summary of the SSMP program, as appropriate, to keep it updated and accurate and available for audit at all times.	<input type="checkbox"/> Annual evaluation and update of the SSMP.	Updates and evaluation to be performed by maintenance and engineering staff by amendment identifying any revisions to the SSMP.	Annual update due September 30, of each year.
(vii) Overflow Emergency Response Plan: The dischargers shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan should include the following: (A) Ensure proper notification procedures so that the discharger is informed of all SSOs in a timely manner (to the greatest extent possible) (B) Ensure that all overflows (including those that do not discharge to waters of the State) are appropriately responded to, including ensuring that reports of overflows are immediately dispatched to appropriate personnel for investigation and appropriate response;	<input checked="" type="checkbox"/> SSO Emergency Response Plan	City enacted Administrative Regulation 808 effective January 1, 2002, which describes the Sanitary Sewer Overflow Response Procedures.	SSO Emergency Response Plan due by January 1, 2003

WDR Reference	Deliverables	Notes	Due Dates
<p>(C) Ensure immediate notification to the public, health agencies and other impacted entities (e.g., water suppliers) of all overflows. Report all SSOs to the Regional Water Quality Control Board and the Orange County Health Care Agency, and report to the State OES if the overflow is 1,000 gallons or larger. The SSMP should identify the public health agency and other officials who will receive immediate notification;</p> <p>(D) Ensure that appropriate staff and contractor personnel are aware of and follow the plan and are appropriately trained;</p> <p>(E) Provide emergency operations, such as traffic and crowd control and other emergency response; and</p> <p>(F) Take all reasonable steps to contain sewage and prevent sewage discharges to surface waters and minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.</p> <p>(G) Develop and implement a plan for the use of portable aerators where complete recovery of the sanitary sewer overflows is not practicable and where severe oxygen depletion in existing surface waters is expected.</p> <p>(H) Develop and implement a plan to respond in a timely manner to spills and other emergencies. Collection system staff should be able to respond to a sewage spill in less than an hour from the</p>	<p>✓ SSO Emergency Response Plan</p>	<p>City enacted Administrative Regulation 808 effective January 1, 2002, which describes the Sanitary Sewer Overflow Response Procedures.</p> <p>In addition, the City currently has on hand several portable generators for the express use of its 28 sewer lift stations.</p>	<p>SSO Emergency Response Plan due by January 1, 2003</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>first call. The system should be capable of meeting this response time ay or night, every day of the week. The system must own or have ready access to spill and emergency response equipment such as vacuum trucks, hydroflushers, pumps, temporary bypass hoses, and portable generators.</p>			
<p>(viii) Fats, Oils and Grease Control Program. Prepare and implement a grease, fat, and oil source control program to reduce the amount of these substances discharged to the sewer collection system. This plan shall include the legal authority to prohibit discharges to the system and identify measures to prevent SSOs caused by fats, oils, and grease blockages of sewers. The elements of an effective grease control program may include requirements to install grease removal devices (such as traps, or preferably, interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements. An effective grease control program must also include authority to inspect grease producing facilities, enforcement authorities, and sufficient staff to inspect and enforce grease ordinance.</p> <p>(A) The grease control program shall identify sections of the sewer system subject to grease blockages and establish a cleaning maintenance schedule for each section; and</p> <p>(B) The program shall develop and implement source control measures, for all sources of grease and fats discharged to the sewer system, for each section identified in (A) above.</p>	<p><input type="checkbox"/> FOG Control Program.</p>	<p>City is currently participating both monetarily and as a member of the FOG Steering Committee, and will incorporate the tools developed from the study to establish appropriate control methods to reduce FOG in the collection system.</p> <p>Upon release of Ph. 1 FOG Study, begin to evaluate "tools" with report to P.W. Director by June 1, 2003.</p> <p>Prepare "Draft" FOG Control Program incorporating Legal Authority and submit to P.W. Director by September 1, 2004</p>	<p>FOG Program due by 12/30/04</p>
<p>(ix) System Evaluation and Capacity</p>	<p><input type="checkbox"/> Capacity Evaluation Plan, which</p>	<p>In the Summer of 2002, the City updated its</p>	<p>Capacity Evaluation</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>Assurance Plan: Prepare and implement a capital improvement plan that will provide hydraulic capacity of key sewer system elements under peak flow conditions. At a minimum, the plan must include:</p> <p>(A) Evaluation. Steps to evaluate those portions of the collection system, which are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. 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, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;</p> <p>(B) Capacity Enhancement Measures. Establish a short- and long-term capital improvement program to address identified hydraulic deficiencies including prioritization, alternatives analysis, and schedules; and</p> <p>(C) Plan Updates. The plan must be updated, at a minimum annually, to describe any significant change in proposed actions and/or implementation schedules. The updates should include available information on the performance of measures that have been implemented.</p>	<p>prioritizes CIP relative to sensitive environs.</p>	<p>Sewer Master Plan, which includes potential capacity deficiencies. (Engineering Staff to prepare a priority list by June 1, 2003 or sooner)</p>	<p>Plan due by 07/30/05</p>

WDR Reference	Deliverables	Notes	Due Dates
<p>(x) SSMP Program Audits. As part of the SSMP, the permittee shall conduct an internal audit, appropriate to the size of the system and the number of overflows, and submit a report of such audit, evaluating the SSMP and its compliance with this subsection, including its deficiencies and steps to correct them.</p>	<p><input type="checkbox"/> Report of Audit of SSMP with level of compliance and deficiencies, and programs to eliminate deficiencies.</p>	<p>Engineering Staff shall coordinate with maintenance staff to prepare the Audit by on an annual basis to be included with the annual update.</p>	<p>Annual update due September 30, of each year.</p>
<p>(xi) Communications. The discharger should communicate on a regular basis with interested parties on the implementation and performance of its SSMP. The communication system should allow interested parties to provide input to the discharger as the program is developed and implemented.</p>	<p><input type="checkbox"/> Establish communication plan for the dissemination of requested information to interested parties.</p>	<p>Engineering Staff to recommend communication plan (by January 1, 2003)</p>	

RCA ROUTING SHEET

INITIATING DEPARTMENT:	Public Works
SUBJECT:	Approve the Sanitary Sewer Management Plan Development Plan and Schedule
COUNCIL MEETING DATE:	July 16, 2007

RCA ATTACHMENTS	STATUS
Ordinance (w/exhibits & legislative draft if applicable)	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Resolution (w/exhibits & legislative draft if applicable)	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Tract Map, Location Map and/or other Exhibits	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Contract/Agreement (w/exhibits if applicable) <i>(Signed in full by the City Attorney)</i>	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Subleases, Third Party Agreements, etc. <i>(Approved as to form by City Attorney)</i>	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Certificates of Insurance <i>(Approved by the City Attorney)</i>	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Fiscal Impact Statement (Unbudgeted, over \$5,000)	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Bonds (If applicable)	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Staff Report (If applicable)	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Commission, Board or Committee Report (If applicable)	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>
Findings/Conditions for Approval and/or Denial	Attached <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/>

EXPLANATION FOR MISSING ATTACHMENTS

REVIEWED	RETURNED	FORWARDED
Administrative Staff	()	(Dub)
Deputy City Administrator (Initial)	()	(FE)
City Administrator (Initial)	()	(pcj)
City Clerk	()	

EXPLANATION FOR RETURN OF ITEM:

(Below Space For City Clerk's Use Only)

