RESOLUTION NO. 27,893

A RESOLUTION OF THE COUNCIL OF THE CITY OF BURBANK APPROVING THE FINAL PLAN FOR THE SEWER SYSTEM MANAGEMENT PLAN.

THE COUNCIL OF THE CITY OF BURBANK FINDS:

A. On May 2, 2006 The California State Water Resources Control Board (State Board) adopted WDRs No. 2006-0003, the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WDRs).

B. These WDRs are the regulatory mechanism for all agencies and cities (cities) that own or operate sanitary sewer collection systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility.

C. The ultimate goal of the WDRs is to reduce the frequency and volume of sanitary sewer overflows (SSOs) by requiring cities to properly operate, maintain, and manage their wastewater collection system. This is to be done by developing and implementing a system-specific Sanitary Sewer Management Plan (SSMP). The City has developed such a plan.

D. On July 24, 2007, The Council approved the proposed Development Plan and Schedule for the Sewer Systems Management Plan (SSMP) as required by the WDRs. In accordance with the compliance schedule, various sections of the SSMP have been completed and certified with the State Board prior to their required completion dates. The SSMP has now been completed in its entirety and the final plan for the sewer system is ready for approval by Council.

E. The Council hereby certifies that the City’s final SSMP is in compliance with the State Board’s SSMP requirements and is hereby approved.

c: B. Teaford, D. Rynn, S. Richardson-PW
THE COUNCIL OF THE CITY OF BURBANK RESOLVES THAT:

1. The final Sewer System Development Plan and Schedule for the Sewer System Management Plan is approved as set forth in the April 21, 2009 staff report incorporated herein.

PASSED and ADOPTED this _21st_ day of _April_, 2009.

s/Dave Golonski
Dave Golonski
Mayor of the City of Burbank

Attest:

s/Margarita Campos
Margarita Campos, CMC, City Clerk

Approved as to Form and Legal Content
Dennis A. Barlow, City Attorney

By: s/Carolyn A. Barnes
Carolyn A. Barnes
Senior Assistant City Attorney

STATE OF CALIFORNIA  )
COUNTY OF LOS ANGELES ) ss.
CITY OF BURBANK     )

I, Margarita Campos, CMC, City Clerk of the City of Burbank, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the Council of the City of Burbank at its regular meeting held on the _21st_ day of _April_, 2009 by the following vote:

AYES: Council Members Bric, Gordon, Ramos, Reinke and Golonski.

NOES: Council Members None.

ABSENT: Council Members None.

s/Margarita Campos
Margarita Campos, CMC, City Clerk
SEWER SYSTEM MANAGEMENT PLAN

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
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Executive Summary

The City of Burbank is required to maintain compliance with the California State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems. The purpose of the Order is to require agencies to prepare a plan and schedule for measures to be implemented to reduce the frequency and volume of sanitary sewer overflows (SSOs), as well as measures to effectively clean up and report SSOs. This Sewer System Management Plan (SSMP) is organized to correspond to the sections of the Order. The SSMP consists of eleven chapters.

By implementing the SSMP, the City of Burbank shall:

- Properly fund, manage, maintain and operate its sanitary sewer systems to prevent SSOs;
- Construct and maintain the collection system using trained staff (and/or contractors) possessing adequate knowledge, skills, and abilities, as demonstrated through a validated program; and
- Fully comply with the Order.
Chapter 1 - Goals

The goals of this Sewer System Management Plan (SSMP) are as follows:

- To properly manage, operate and maintain all parts of the wastewater collection system
- To provide adequate capacity to convey peak sewer flows
- To minimize the frequency of Sanitary Sewer Overflows (SSO), and
- To minimize the human health and environmental impacts of SSOs.
Chapter 2 - Organization

The management, administrative and maintenance positions responsible for the implementation of this SSMP are identified in Chart 1 included in the Appendix. The Water Reclamation and Sewer Division Head has ultimate authority over the implementation, management and updating of this program. The Public Works Director and the Assistant Public Works Director – Wastewater Systems are the Legal Responsible Officers authorized to certify SSO reports.

The flow of communication for the response to a reported SSO is shown on Chart 2 included in the Appendix and references the Reporting Requirements flow chart. The Assistant Public Works Director – Wastewater Systems and/or the next most senior position in the Wastewater Systems Division will report SSO information to the Los Angeles Regional Water Board, OES, and Health Services. The Collection Systems Leadworker is the critical link in collecting the field data to be reported to the Regional Water Board. The Collection Systems Leadworker or an engineer from the Wastewater Systems Division will enter the SSO data into the CIWQS database.

Extensive details of SSO response are described in the Sanitary Sewer Overflow Emergency Response Plan contained in the SSMP Appendix.
Chapter 3 – Legal Authority

The City of Burbank has the legal authority through Title 8, Chapter 1 of the Burbank Municipal Code to:

- Prevent illicit discharges into its sewer collection system
- Require that sewers and connections to sewers be properly designed and constructed
- Limit the discharge of fats, oils and grease and other debris that may cause blockages of the sewer
- Enforce the provisions of its sewer ordinances and policies.

A copy of Title 8, Chapter 1 of the Burbank Municipal Code is included in an appendix of this SSMP and can be found at http://www.codepublishing.com/ca/burbank/
Chapter 4 – Operation and Maintenance Program

Appropriate sewer system operations and maintenance are essential elements of the City of Burbank Public Works Department’s SSO reduction plan. While the Assistant Public Works Director – Wastewater Systems (APWD) has overall responsibility for the operation and maintenance of the sewer system, this section of the SSMP will provide guidance and specify field level responsibilities for the various elements of the Operation and Maintenance Program.

Mapping

The City of Burbank Public Works Department (City) utilizes a Geographical Information System (GIS) for its wastewater system maps. The wastewater system maps were created based upon record drawings, system video inspection and field verification. The GIS includes sewer features such as pipe location, diameter, material, maintenance holes, sewer pump stations, pressure pipes and valves.

Map Updates

A hardcopy version of the maps will be updated by Wastewater Engineering as permits are issued for changes in the sewer collection system, and as sewer collection system improvement projects are completed. A hardcopy version of the map will be updated by the Collection Systems Leadworker as field conditions reveal a need for map corrections.

The marked hard copies of the maps will be collected to update the GIS data. The updates to the GIS will be accomplished by Wastewater Engineering. Upon the completion of these updates, new hardcopy maps will be distributed to the Collection Systems Crew.1 The hardcopy maps will include the date that the maps were last updated.

Map Improvements

Future improvements to the maps are anticipated. A goal for future maps will be to include the storm drain system and detail maps for areas which require more information.

Preventative Maintenance

Current Preventative Maintenance by City

Prioritized preventative maintenance currently includes:

Sewer Pipeline Cleaning

The Collection Systems Crew cleans the gravity sewer lines on a regular basis. All pipes ten inches (10”) or less in diameter are typically jetted, and proofed with a root saw. All pipes greater than ten inches (10”) in diameter are jetted. All sewers serving

1 The distribution list for maps shall be: Collection Systems Leadworker Office, Leadworker Truck, Combo Truck, Jet Truck, CCTV Truck, and Wastewater Engineering.
restaurants and other food service establishments (FSEs) are jetted on a more frequent basis. If there is evidence of medium to high fats, oils and grease (FOG) accumulation on a section of sewer, the industrial waste inspector is notified and FSEs served by that sewer are inspected to ensure compliance with the sewer ordinances and that BMPs are being properly implemented.

Sewer sections that are subjected to debris accumulation, such as siphons, are jetted on a more frequent basis.

**Sewer Pipeline Inspection**
In 2005, all publicly owned sewer lines 10” in diameter and greater were video inspected to determine the physical integrity of the sanitary sewer system. This inspection effort revealed that the collection system has no significant structural deficiencies requiring immediate repair.

Sewer lines are currently video inspected on an as needed basis with every pipeline in the collection systems on an inspection schedule. This video inspection is an important component of the City’s condition assessment process used in the prioritization of preventive maintenance activities and in the prioritization of correcting structural deficiencies.

Data collected during the course of these activities is also used to adjust maintenance priorities in order to more effectively prevent SSOs.

SSO locations, causes and sizes are tracked to identify any trends which may lead to the reprioritization of preventative maintenance activities.

**Odor Control Maintenance**
Carbon filters for odor control are replaced on a routine basis as necessary.

Smoke testing is conducted in areas experiencing odor problems to identify illicit connections and/or fractures in the sewer system. Illicit connections and fractures can be a significant source of inflow and infiltration. When identified illicit connections and fractures are removed and/or repaired.

**Preventative Maintenance by Others**

**Sewer Lateral User Rebate Program (SLURP)**
In addition to routine maintenance activities, the City has implemented an incentive program that encourages residents to maintain their privately-owned sewer laterals. This program provides rebates to owners of single-family residences for cleaning and video-inspecting their sewer lateral. This program is designed to keep roots from private sewer laterals out of the public sewer main, reducing the number of overflows from these sewer lateral roots. SLURP also provides useful information to residents regarding the maintenance of their sewer lateral. Information on this program is available at [www.BurbankUSA.com/SLURP](http://www.BurbankUSA.com/SLURP).

**Vermin Control**
Sewers infected by insects are chemically treated as needed.
Lift Stations Inspection and Maintenance
The Mariposa and Beachwood Lift Stations are physically inspected on a regular basis. Preventive maintenance is performed routinely to maintain proper operation.

Documentation of Activities

Scheduled Activities
The Collection Systems Crew performs systematic cleaning of the sewer system, beginning at the outer edges of the collection system and working toward the Burbank Water Reclamation Plant.

Inspection of the collection system is performed systematically, beginning with the sections with the oldest pipelines and working toward the sections with more recently installed pipeline.

Current Documentation Practice
Documentation of sewer line cleaning is entered into the Burbank GIS program using tablet technology. A cleaning report can be accessed in the GIS program which shows the most recent cleaning of each pipeline.

Future Documentation Practice
The City is testing a new application based program for data entry of sewer line cleaning.

Rehabilitation and Replacement Plan

Rehabilitation and Replacement of Known Deficiencies
The City does not have any known areas of damaged sewer line that are in immediate need of repair. All damaged sewer locations identified through previous CCTV inspections as needing immediate repair have been fixed.

Rehabilitation and Replacement of Discovered Deficiencies
During the regularly scheduled CCTV inspection of the sewer system, damaged sewer pipe is identified. A ranking from 1 to 5 is given to each damaged location, with 1 being the least severe and 5 being most severe. Those locations identified with a 5 ranking are scheduled for immediate repair. Those locations identified with a lower damage ranking are scheduled for future inspection to evaluate the future need to repair these sections of pipe.

Training for Collection Systems Crew
The City recognizes the importance of its staff in collection system operations, maintenance and monitoring. Training opportunities are provided in several different ways including:

Tuition Reimbursement
Employees are reimbursed for sixty percent (60%) of the cost, up to $1,500 per individual in any one fiscal year, of tuition, fees, books (including computer software and audio tapes that are required for class participation), and other supplies (except
drafting equipment, tools, etc., which are retained by the employee following completion of the course) for courses which are directly related to the employee’s present position or promotion.

**Weekly Training**
During weekly meetings the collection systems crew staff is provided ongoing equipment and safety training, as well as training in pollution prevention, system maintenance and operation.

**Mentoring**
The City has establish an informal training through mentoring of experienced collection systems personnel with those new to the collection system.

**Certification**
All members of the collection systems crew are encouraged to obtain certification from the California Water Environment Association (CWEA). A progressive bonus program has been established to provide an incentive for advanced certifications.

**Contractor Training**
Burbank requires that any contractors hired for sewer construction and rehabilitation have adequately trained staff.

**Contingency Equipment and Replacement Inventories**

**Collection System Contingency Equipment**
Contingency equipment (such as portable pumps, generators) supports an effective response to emergency situations. An inventory of spare/replacement parts kept in inventory minimizes downtime in the event of equipment failure. A list of items kept in inventory is included in the Appendix. This list will be reviewed by the APWD or his delegate on at least an annual basis to ensure that there is an adequate inventory of critical parts and equipment needed for system operation and maintenance. The City has established a relationship with the Cities of Glendale, Pasadena and Los Angeles so that in the case of an unforeseen emergency, the City is able to borrow any equipment that it does not have in inventory. The City also has a contract with a major environmental emergency response contractor to provide emergency sewer cleanup services on an on-call 24-hour per day, 7-day per week basis. This contractor can provide vacuum trucks, pumps, pressure washers and other emergency equipment and operators as needed.

**Pump Station Contingency Equipment**
The Mariposa pump station has 100% redundant pump capacity. This spare capacity minimizes the risk that this pump station will experience downtime. In addition, the Mariposa pump station has a backup generator which provides emergency power in the case of a power outage. In the event that the Beachwood pump station should fail, or experience inflows that are in excess of existing pump capacity, sewage will automatically gravity flow to the City of Los Angeles’ North Outfall Sewer.
Chapter 5 – Design and Performance

Design Standard

The City has developed and maintained design guidelines for new and rehabilitated system, with the Sewer Design Manual of City of Los Angeles in a supplemental role.

Inspection and Testing Standards

The City has adopted the Standard Specifications and Plans for Public Works Construction also known as the “Greenbook” as inspection and testing standards.

Performance

The City consistently reviews standard plans and specifications as well as looking to the industry for input to improve design materials and methods. The City collects feedback from contractors at the public counter and additional input from the City inspectors to further improve means and methods.
Chapter 6 – Overflow Emergency Response Plan

The City of Burbank Public Works Department’s *Sanitary Sewer Overflow Emergency Response Plan* contained in the appendix, provides a standardized course of action for Wastewater Systems personnel to follow in the event of an SSO, and ensures that the City of Burbank is adequately prepared to respond to SSO events.
Chapter 7 – Fats, Oils, and Grease (FOG) Control Program

Background

In the City of Burbank, FOG has been the cause of approximately 40% of all sewer blockages and/or overflows. Since 2000, Public Works’ Collection Systems Crew has been tracking major grease dischargers throughout the City. These dischargers are mainly Food Service Establishments (FSEs) or restaurants and monthly “hot spot” lists are generated and submitted to the ISRCP inspectors. The crew cleans and monitors these “hot spots” on a monthly basis. The inspectors will follow-up with the individual restaurants verifying that their interceptor cleaning manifests are kept up to date in addition to any other BMPs that may be required. Additional grease reduction/elimination education is also provided as necessary.

Following an extensive outreach to and in partnership with the over 280 FSEs in Burbank, the City developed a three-pronged approach to its FOG Control Program, including:

1. Source Control

2. Sewer Cleaning

3. Community Outreach and Education

Recognizing that blockages caused by FOG could result in SSOs and have an adverse impact on public health and the environment, the City Council enacted a FOG Control Ordinance (Number 3677) effective August 20, 2005. This Ordinance amended the Burbank Municipal Code Section and after restructuring the Code it is currently located under Title 8-1-502.2 Through the implementation of its FOG Control Program, the City has achieved a significant reduction of FOG-related sanitary sewer overflows (SSOs) dating back to fiscal year 2000/01.

FOG Control Program

The following is a description of the City’s FOG Control Program following the order provided in the State’s General Waste Discharge Requirements for developing SSMP Part 7, FOG Control Program.

Implementation Plan and Schedule for Public Outreach

Public education outreach and stakeholder involvement is an important part of the City’s Industrial Source Reduction and Control Program and is an ongoing effort. Educational videos, DVDs, and brochures describing best management practices (BMPs) are distributed to FSEs doing business in the City. The City’s Recreation Guide is published on a quarterly basis and regularly includes full page reminders of proper ways to dispose of grease and oil in and around the kitchen.
Plan and Schedule for the Disposal of FOG Generated Within the Sanitary Sewer System
The City does not own or operate any FOG disposal facilities. The FSEs must, at a minimum, collect the waste FOG and prevent the waste FOG discharge into the sewer system by implementing the following BMPs:

“Dry wipe” pots, pans, dishware and work areas prior to washing. Use rubber scrapers or paper towels to remove FOG from cookware, utensils, and serving ware.
Collect waste cooking oil and store properly in recycling barrels or drums. Use a licensed hauler or recycling facility to dispose of this waste.
Use absorbent products to clean under fryer baskets and other locations where FOG may be spilled or dripped.

The City does not allow FOG waste haulers to discharge waste FOG into the sewer system either. However, it provides FSEs with a list of licensed grease haulers and rendering companies.

Legal Authority To Prohibit Discharges and Identify Measures To Prevent SSOs and Blockages Caused by FOG
Burbank Municipal Code Title 8.1 Section 5, provides the legal authority to prohibit FOG discharges by any and all users, including FSEs. To mitigate SSOs resulting from blockages caused by FOG accumulation, the City’s Department of Public Works implements its Overflow Emergency Response Plan (OERP). The OERP provides guidelines for investigating FOG-related SSO’s and taking enforcement and corrective actions to prevent future occurrences.

Grease Removal Devices Requirements and Standards
Burbank Municipal Code Title 8.1, Section 502.2 (c) states the following:
“Grease interceptors or traps, oil separators, and/or grit interceptors shall be provided when, in the opinion of the Director, they are necessary for the proper handling of wastewater containing excessive amounts of grease and oil, or grit; except that such interceptors shall not be required for residential users. All interception units shall be of type and capacity approved by the Director and shall be so located to be easily accessible for cleaning and inspection. Such interceptors, traps, and/or separators shall be inspected, cleaned, and repaired regularly as needed by the user at their expense.”

Major provisions of the FOG Control Ordinance and its Rules and Regulations regarding the requirements for installing and maintaining grease removal devices are summarized below:

Grease Interceptor Requirements
Installation of grease interceptor(s) is required at all FSEs that have the potential to generate waste FOG unless a Conditional Waiver is granted, including: (1) FSEs that are to be newly constructed, (2) any existing non-FSE converting to an FSE, (3) FSEs with remodeling valued at $50,000 or more, and (4) any FSE deemed by the Director, for example, any FSE that is known to cause FOG-related sewer blockages or overflows or fails to implement BMPs.
A grease interceptor is a plumbing device, with a minimum size of 750 gallons that is installed in an industrial wastewater drainage system to intercept and prohibit FOG from entering the sewer system. If an FSE can demonstrate that installation of a grease interceptor is not feasible due to space constraints or other considerations, the Director
may issue a variance from grease interceptor requirements and authorize the installation of alternative grease removal devices.

The design, construction, installation and testing of commercial kitchen grease interceptors or grease traps shall be in accordance with the California Plumbing Code and/or the County of Los Angeles Pretreatment Guidelines for Restaurant and Food Service Operations.

**Operation and Maintenance of Grease Interceptors**
FSEs are required to comply with the following requirements for operation and maintenance of grease interceptors:

- Grease interceptors shall be maintained in efficient operating condition by periodic removal of accumulated grease including floating material, sludge and solids.
- Grease interceptors shall be cleaned at a frequency such that the combined FOG and solids accumulation does not exceed 25% of the total liquid depth of the grease interceptor.
- A log of grease interceptor cleaning and maintenance practices shall be maintained.
- Copies of records and manifests of hauled waste FOG or hauled interceptor wastewater shall be maintained in FSEs files.
- FSEs are also required to comply with the requirements for the operation and maintenance of grease traps as set forth in the manufacturers’ specifications.

**Authority to Inspect Grease Producing Facilities, and Enforcement**

Burbank Municipal Code Title 8, Section 1.5 (BMC-8.1), provides the Department of Public Works with the legal authority to inspect FSEs and monitor the implementation of Best Management Practices. As part of routine inspection activities, inspectors from the Industrial Source Reduction and Control Program (ISRCP) determine permit requirements and verify compliance with the BMC 8.1 provisions. Additionally, information and training materials such as multi-language DVDs, BMP posters, a summary of FOG Control BMPs, and lists of licensed grease waste haulers and pretreatment equipment manufacturers are provided to help businesses comply. Major provisions of the BMC 8.1 are summarized below:

**Wastewater Discharge Permit**
FSEs are required to obtain a Permit, pay a Permit application fee of $50, and an annual Inspection and Control fee of $330. An FSE may be Authorized to use the sewer if it does not potentially generate waste FOG during food preparation processes, and does not significantly affect the publicly owned treatment works (POTW), provided that the FSE has implemented and demonstrates compliance with BMPs as specified in the Rules and Regulations, and does not qualify as a stormwater “Critical Source”.

**Revocation of Conditional Waivers**
The Director’s determination to revoke an FSE’s Conditional Waiver from Grease Interceptor Installation Requirements is based on the FSE’s non-compliance with any of the terms and conditions of the Conditional Waiver. Specific violations that may result in revocation of the FSE’s Conditional Waiver are as follows:
The FSE disposes of food waste into sinks or equivalent, rather than directly into the trash or garbage receptacles;
The FSE fails to “Dry Wipe” all pots, pans, dishware and work areas prior to washing of such utensils, equipment or areas;
The FSE fails to collect waste cooking oil and store it properly in recycling barrels or drums;
The FSE is confirmed to have contributed to FOG accumulation within the sewer collection system that resulted in, or threatens to result in, a Sanitary Sewer Overflow (SSO); or
The FSE fails to comply with any other condition deemed appropriate by the Director.

Variance to Allow Alternative Grease Removal Devices
BMC-8.1 Section 502.2 (E) states: “If an FSE can demonstrate that installation of a grease interceptor is not feasible due to space constraints or other considerations, the Director may issue a variance from grease interceptor requirements and authorize the installation of alternative grease removal devices. Alternative grease removal devices include, but not limited to, devices that are used to trap, separate and hold grease from wastewater and prevent it from being discharged into the POTW. All alternative grease removal devices must be approved, by the Director, on a case-by-case basis. The FSE must also demonstrate that BMPs have been implemented.

Identification of Sanitary Sewer System Sections Subject to FOG blockages and Establishment of Maintenance Schedule
SSOs caused by blockages from FOG are monitored for location and required cleaning frequency. All blockages are logged and potential source identified by FSE name and address. Locations with a high number of FOG blockages are given special investigation and cleaning status. Sewers prone to FOG accumulation or blockages are given high priority and cleaned more frequently in an effort to prevent FOG-related overflows. All reaches, including “non-problem” sewers, are included in a routine preventive maintenance cleaning schedule.

Development and Implementation of Source Control Measures for All Sources of FOG
The ISRCP investigates potential source(s) of FOG waste to verify compliance with applicable sections of BMC-8.1. The City implements an Enforcement Response Plan. FSEs are required to have an industrial wastewater permit, comply with source control measures for all sources of grease, implement BMPs, install grease interceptors as applicable, and are subject to routine inspections to verify continuous compliance. In the event a user fails to comply with the requirements of BMC-8.1, the ISRCP takes immediate enforcement action. The Enforcement actions available include the following:

Notice of Violation (NOV) – A notice by certified mail or personal service which identifies the permit condition(s) violated, the circumstances surrounding the violation(s), and provides the FSE with an opportunity to correct the noncompliance on its own initiative.
Within 10 days of the NOV, the FSE is required to conduct an investigation and submit a written response describing the cause of the violation, the actions taken to correct the violation or prevent future violations and the date those corrective actions will be completed.
Conditional Waiver Revocation – The City may revoke the FSE’s Conditional Waiver for cause and require an installation of a grease interceptor.
Administrative Enforcement Order – An order that requires the FSE to cease a specific activity and implement corrective actions to permanently achieve and maintain compliance. An Order may be issued when an FSE fails to achieve compliance after a NOV is issued or when a pattern of noncompliance is observed. The City may pursue civil and criminal penalties, as well as injunctive relief.

Reference
BMC-8.1 Sewers Section 5 Industrial Waste and Disposal, City of Burbank, Department of Public Works, Enforcement Response Plan
Chapter 8 – System Evaluation and Capacity Assurance Plan

The City of Burbank prepares and implements 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.

Evaluation

Potential structural deficiencies have been identified and prioritized in the Sewer System Evaluation and Capacity Assurance Plan prepared by Kennedy Jenks in 2005 which is included in the Appendix to this plan. The deficiencies identified in the Kennedy Jenks Plan are based on maximum build-out under current and future zoning regulations.

Design Criteria

The City has adopted the Standard Specifications and Plans for Public Works Construction also know as the “Greenbook” as the design criteria, with the Sewer Design Manual of City of Los Angeles in a supplemental role.

Capacity Enhancement Measures

Short-term rehabilitation actions such as flow changes effected by the adjustment of diversion gates have already been implemented. Long-term rehabilitation actions have been identified and scheduled for the entire system based on the availability of funds. Some identified structural deficiencies will be made by private developers to mitigate the impacts of new development.

Schedule

The City has developed and maintained a schedule of completion dates for all capital improvement programs. The schedule is to be reviewed and re-evaluated in accordance with the SSMP review and update requirement.
Chapter 9 – Monitoring, Measurements and Program Modifications

The Wastewater Systems Division collects and analyzes information to establish and prioritize appropriate maintenance and operations activities by using this information to identifying SSO trends, pipeline sections of observed grease, root or debris accumulation, etc. At the time of this writing, the primary identified cause of SSO’s has been root blockages and grease blockages. As a result, the Wastewater Systems Division will routinely inspect and clean sewer lines in areas of known grease accumulation. This division has also conducted field studies of root killing products. The Wastewater Systems Division will continue to collect and analyze information to establish and prioritize appropriate maintenance and operations activities.

Monitoring, Measurements and Program Modifications are vital to keeping appropriate SSMP activities current. Overall, maintaining the sewer system at an acceptable working level and minimizing SSO’s are the long term goals of the City of Burbank. Being innovative and proactive with City programs allows for a reduction in negative effects within our system caused by blockages that can and do arise from many unexpected and expected contingencies. Establishing appropriate guidelines to follow will allow for any potential issue to be prioritized and resolved in a timely manner.

Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities
The City has been active in implementing programs that assist staff in gathering data and information to solidify the needs to prioritize its Sewer System Management Plan (SSMP).

Sewer Main & Private Lateral Connection Evaluation
The City utilizes its CCTV capability to classify inspected Sewer Mains and Private Lateral Connections using a system based on their current conditions. Sewer Mains are identified as having grease, roots or debris and are categorized based on the severity of the condition. Lateral connections are classified based on their degree of root infestation or debris at the connection with the City main. The criteria under which Sewer Mains & Private Lateral Connections are classified are as follows: Heavy, Medium and Small. The classification is at the discretion of the field operator and then verified by staff while reviewing the recordings. Sewer mains which have heavy or medium debris that could cause an SSO are tended to immediately. Sewer mains with small debris are cleaned in a timely manner based on a schedule.

Private Lateral Connections are privately owned and maintained. During the CCTV inspections, the Private Lateral connections are observed and if a medium or heavy condition is observed, a courtesy contact is made by Wastewater Systems staff informing the property owner of the discovery along with information of our SLURP (Sewer Lateral User Rebate Program) program which is geared to residential premises. Those connections which service commercial or industrial users, if deemed to contribute to possible blockages trigger inspections from our industrial waste inspectors. For possible residential issues, staff researches the information via our GIS systems to identify the
private lateral and which resident is affected. After this research takes place and the resident is identified staff will contact the resident through mail.

**Operation and Maintenance**
Various means have been developed to maintain an appropriate working collection system. Responsibilities have been allocated in making the program an essential element of the SSMP. Maintenance is carried out by staff assigned to take on certain responsibilities.

The City’s Wastewater/Sewer system is sectioned off into 20 sections. Staff is assigned specific designations to conduct maintenance throughout the year. City crews have a daily goal of 6000ft – 8000ft. Maintenance typically consists of cleaning the City sewer mains via jetting and during certain occasions using mechanical cutters. Whether a main is problematic or not, maintenance and preventative maintenance are done along all City mains throughout the year.

A hard copy record or log of the sections maintained are kept on file keeping a timeframe of the last time a section was cleaned. During maintenance, if differences are encountered from what is on record, it will be noted and our GIS system will be updated. The City’s GIS system contains pertinent information in relation to our sewer system. Updating the GIS, allows the City to identify information that can be gathered on a more reliable bases. During maintenance, the data observed and collected will serve to adjust priorities and prevent SSOs.

In areas with Food Service Establishments (FSEs) or industrial users, blockages can occur on a more frequent basis due to the contents discharged, i.e. Fats, Oil & Grease. In helping to alleviate this occurrence, our industrial waste inspectors inspect FSEs to confirm that they are in compliance and proper Best Management Practices (BMPs) are in place. Our inspectors confirm and cross reference information on file to make sure industrial users have Waste Discharge Authorizations and/or Permits.

Documenting activities is currently done in hard copies and the Burbank computer mainframe program which generates reports to show the most recent cleaned sections. The Collection Systems crew work of a systematic schedule which has them performing inspections and maintenance from older pipes to newer pipes within each section. The City is working towards attaining future documentation of integrating paper documents with the GIS system.

**Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP**
The Wastewater Systems Division will establish a formal method to monitor the implementation effectiveness of each element of the SSMP in relation to the WDR compliance regulations. Modifications and updates to the City’s SSMP will be based on future results of the proposed plan.
Assess the success of the preventative maintenance program
Assessing and monitoring the preventative maintenance program is crucial with maintaining proper working functions of the system. Through the tracking of records, it can be determined if adjustments or modifications need to be taken. Trends develop over a period of time allowing the City to modify and adequately adjust the program as needed. The City has been proactive in addressing issues with private lateral connections. Informing the public to be proactive and work with the City to help prevent and/or reduce blockages and overflows that can affect the City as well as the public.

Update program elements, as appropriate, based on monitoring or performance evaluations
The City’s performance is evaluated on a consistent basis based on monitoring and reviewing of existing programs. As needed, improvements are made to enhance the performance of the system.

Preventative maintenance program
During the maintenance process, City sewer mains are identified and noted as having certain criteria that require more attention. The City is made aware of sections within the system susceptible to factors such as overflows, blockages and other pipe conditions. CCTV recording assists in identifying potential sections in the sewer that need to be addressed. Whether in poor condition, infiltrated with roots or debris, assessing the sewer through this method will allow for maintenance to be conducted more often in problematic areas.

Fats, Oils, and Grease (FOG)
The City’s program is intended to identify and reduce overflows in relation to FOG. Implementation of the program and requiring FSEs to place adequate BMPs assist the City in the reduction of FOG impacts. Monitoring, site inspections and scheduled maintenance on sewers providing a service to those FSEs have resulted in a decreased impact of FOG related SSOs.

City Tree Root Program
The City mains are maintained year round using jetter to address blockages. CCTV inspection is one way of identifying problematic areas that need to be addressed as well as notification from the public when their sewer is affected.

Infiltrating roots affect both private and public sewers. The City has been proactive in creating programs to have the public assist in preventing SSOs. Utilizing the CCTV inspections, the City is able to identify locations with adversely impacted root problems and bring them to the attention of the owner to prevent an SSO from occurring. The City provides the public with helpful information gathered from feedback received. Although the City does not endorse certain entities, we do provide details to assist private owners. City staff is also available to assist residents who have questions.
Sewer Design & Construction
The City uses the Standard Specifications and Plans for Public Works Construction also known as the “Greenbook” for design purposes.

The City implements its “zero spill” policy on construction projects. As part of project approvals, the City requires a spill prevention and response plan to be submitted, approved and implemented during the term of the construction.

Identify and illustrate SSO trends, including: frequency, location and volume.
Trends are identified through collecting and analyzing information. Based on the findings sections are prioritized, maintenance and operations are conducted accordingly. The City will collect information to establish future activities appropriately on a continuous basis.
Chapter 10 – SSMP Program Audits

Program audits are required every two years and document the success of the SSMP and improvements made to it.

Compliance Summary

The City of Burbank has a current internal audit program that evaluates the compliance and conformance of all programs associated with the SSMP. The Wastewater Engineering Division is responsible to conduct a comprehensive, agency-wide audit every two years as the SSMP is implemented. An audit checklist and guidelines are developed to identify deficiencies and subsequent corrective actions, to evaluate agency compliance and conformance with SSMP requirements.

Document Control

All SSMP documents are located in Public Works Wastewater Engineering Division Library. A “SSMP Creation” folder in public drive also serves as the electronic library for the SSMP.

Roles and Responsibilities

The Assistant Public Works Director- Wastewater Systems oversees the agency-wide SSMP audit. The Collection Systems Leadworker oversees the audit of field equipment and performance.
Chapter 11- Communication Program

Community and Satellite outreach

The City of Burbank communicates with satellite contributors and members of the community regularly. The City receives wastewater inflow from and discharges outflow to the City of Los Angeles under contractual agreements. The City of Burbank regularly communicates with the City of Los Angeles by providing flow and strength values to assess financial obligations. The City will continue to communicate regularly with stakeholders on the development and implementation of the SSMP.

Staff SSMP awareness

City staff is required to study elements of the SSMP and provide input on its performance and improvement on continuous basis.
Appendix

- SSO Emergency Response Plan (see separated folder)
- Wastewater Systems Division Organization Chart (included)
- City of Burbank Municipal Code– Title 8, Chapter 1 (included)
- Standard Specifications and Plans for Public Works Construction (see separated folder)
- System Evaluation and Capacity Assurance Plan by Kennedy and Jenks (see separated folder)
- Amalgamated Agreement with City of Los Angeles (included)
- Inventory List of Equipment (included)
Sewer System Management Plan

Organizational Chart

Assistant Public Works Director – Wastewater Systems

Wastewater Engineering

- Senior Civil Engineer
  - Civil Engineer Technician
  - Civil Engineering Assistant

Collection System Crew

- Collection System Supervisor
  - Collection System Journeyman (3)
  - Collection System Worker (3)