

Appendix A

State Water Resources Control Board Orders

**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003**

**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
SANITARY SEWER SYSTEMS**

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as "Enrollees".
2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.
4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

SEWER SYSTEM MANAGEMENT PLANS

5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.
6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.
7. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.
8. It is the State Water Board's intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.
9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached **Monitoring and Reporting Program No. 2006-0003**, are necessary to assure compliance with these waste discharge requirements (WDRs).
10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.
11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more

prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

13. The issuance of general WDRs to the Enrollees will:

- a) Reduce the administrative burden of issuing individual WDRs to each Enrollee;
- b) Provide for a unified statewide approach for the reporting and database tracking of SSOs;
- c) Establish consistent and uniform requirements for SSMP development and implementation;
- d) Provide statewide consistency in reporting; and
- e) Facilitate consistent enforcement for violations.

14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and non-contact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.

15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect

water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.

16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.
17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.
18. California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.
19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.
20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt

this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute “existing facilities” as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.
22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.
23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

1. **Sanitary sewer overflow (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
 - (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
 - (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
 - (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
2. **Sanitary sewer system** – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

3. **Enrollee** - A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general WDRs, and that has submitted a complete and approved application for coverage under this Order.
4. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is <http://ciwqs.waterboards.ca.gov>. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
5. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.
6. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.
7. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.

B. APPLICATION REQUIREMENTS

1. **Deadlines for Application** – All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.
2. **Applications under the general WDRs** – In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to

apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board's website.

3. Coverage under the general WDRs – Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board's Division of Water Quality.

C. PROHIBITIONS

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.

D. PROVISIONS

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 or federal requirement in an existing permit, regulation, or administrative/judicial order or 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 a 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.
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 into

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 13327 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 or 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 the 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.

The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

- (i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
 - (ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
 - (iii) Cleanup of debris at the overflow site;
 - (iv) System modifications to prevent another SSO at the same location;
 - (v) Adequate sampling to determine the nature and impact of the release; and
 - (vi) Adequate public notification to protect the public from exposure to the SSO.
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 and 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 professionals 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 professional(s)' 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 why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

- (i) **Goal:** 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.
- (ii) **Organization:** The SSMP must identify:
- (a) The name of the responsible or authorized representative as described in Section J of this Order.
 - (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 lines of authority through an organization chart or similar document with a narrative explanation; and
 - (c) The chain of communication 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)).
- (iii) **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.);

- (b) Require that sewers and connections be properly designed and constructed;
 - (c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
 - (d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
 - (e) Enforce any violation of its sewer ordinances.
- (iv) **Operation 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;
 - (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;
 - (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 manholes 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;
 - (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

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

(v) **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.

(vi) **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 or 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) Procedures 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.

- (vii) **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.
- (viii) **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 minimum, 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, alternatives 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.
- (ix) **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.
- (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee 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 evaluating the effectiveness of the SSMP and the

Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

- (xi) **Communication Program** – 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.

14. Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

In order to complete this certification, the Enrollee's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

Sewer System Management Plan Time Schedule

<u>Task and Associated Section</u>	Completion Date			
	Population > 100,000	Population between 100,000 and 10,000	Population between 10,000 and 2,500	Population < 2,500
Application for Permit Coverage Section C	6 months after WDRs Adoption			
Reporting Program Section G	6 months after WDRs Adoption ¹			
SSMP Development Plan and Schedule No specific Section	9 months after WDRs Adoption ²	12 months after WDRs Adoption ²	15 months after WDRs Adoption ²	18 months after WDRs Adoption ²
Goals and Organization Structure Section D 13 (i) & (ii)	12 months after WDRs Adoption ²		18 months after WDRs Adoption ²	
Overflow Emergency Response Program Section D 13 (vi)	24 months after WDRs Adoption ²	30 months after WDRs Adoption ²	36 months after WDRs Adoption ²	39 months after WDRs Adoption ²
Legal Authority Section D 13 (iii)				
Operation and Maintenance Program Section D 13 (iv)				
Grease Control Program Section D 13 (vii)	36 months after WDRs Adoption	39 months after WDRs Adoption	48 months after WDRs Adoption	51 months after WDRs Adoption
Design and Performance Section D 13 (v)				
System Evaluation and Capacity Assurance Plan Section D 13 (viii)				
Final SSMP, incorporating all of the SSMP requirements Section D 13				

1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

Reporting Program Section G	
Regional Boards 4, 8, and 9	8 months after WDRs Adoption
Regional Boards 1, 2, and 3	12 months after WDRs Adoption
Regional Boards 5, 6, and 7	16 months after WDRs Adoption

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

1. The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.
2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.
3. All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding a Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.
4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

1. All applications, reports, or information shall be signed and certified as follows:
 - (i) All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)
 - (ii) An individual is a duly authorized representative only if:
 - (a) The authorization is made in writing by a person described in paragraph (i) of this provision; and
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.
2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or

falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc
Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None



Song Her
Clerk to the Board

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

8/6/13

Date



Thomas Howard
Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at <http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/ssor/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none">Reach surface water and/or reach a drainage channel tributary to a surface water; orReach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> • Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	<ul style="list-style-type: none"> • Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • “No Spill” Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee’s Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	<ul style="list-style-type: none"> • Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	<ul style="list-style-type: none"> • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume. 	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a “Username” and “Password” by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition that:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee’s sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee’s sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.

ii. **Reporting SSOs to Other Regulatory Agencies**

These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.

iii. **Collection System Questionnaire**

The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.

iv. **SSMP Availability**

The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13

Date



Jeanine Townsend
Clerk to the Board

Appendix B

SOPs Responding & Reporting

Sanitary Sewer Overflow (SSO) Response

1. Policy

It is the policy of the Utility Maintenance Department to respond quickly and effectively to the report of a sanitary sewer overflow (SSO). Employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, relieve the cause of the overflow, and ensure the area is cleaned as soon as possible to minimize health hazards to the public and protect the environment.

2. Objective and scope

The objective of the Sewer Spill Overflow SOP is to have a clear and concise response plan in place in the event of a sewer spill emergency so that all precautions are taken to preserve public health, property and the environment. When an overflow occurs, maintenance crews shall take all feasible steps and necessary remedial action 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. Furthermore, this SOP documents the necessary steps to be taken post-sewer spill, specifically the reporting requirements to the regulatory agencies. The general scope of this SOP covers from the initial report of a spill, the containment and clean up, to the reporting requirements following the response.

3. Regulatory Agencies

Department of Fish & Wildlife

California Office of Emergency Services (Cal OES)

San Francisco Regional Water Quality Control Board, Region 2, (RWQCB)

Santa Clara County Environmental Health Services (SCC Environmental Health Services)

State Water Resource Control Board (SWRCB)

4. Definitions

Legally Responsible Official (LRO): Designated City Personnel responsible for reporting SSOs within the pre-determined deadlines.

Sanitary Sewer Overflow (SSO): Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

CIWQS: California Integrated Water Quality System, State database for reporting SSOs.

5. Roles and responsibilities

Call Center – Department of Public Works call center during business hours and Milpitas Police Department after hours.

Public Works Maintenance Crew/Standby Crew – Perform preventive maintenance activities, mobilize and respond to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators).

Standby Crew: After hours (5:00 p.m. to 7:00 a.m.) maintenance crew assigned to respond to emergency field calls. Standby crew is trained in utility maintenance activities and emergency utility response.

Public Works Manager (Primary LRO) – Manages field operations and maintenance activities, provides relevant information to management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs, and trains field crews.

Principal Utility Engineer (Secondary LRO) – Oversees and prepares wastewater collection system planning documents, documents new and rehabilitated assets, proposes rate analysis reports and staff recommendations, and coordinates development and implementation of SSMP

Public Works Director/City Engineer (Contingent LRO) – Establishes sewer system plans strategy, leads and assigns duties of engineering staff, prepares budgets and serves as public information officer.

6. Materials, tools, and equipment

Sanitary Sewer Overflow and Backup Response Plan

Pre-packaged Sanitary Sewer Overflow Envelope

Hydro Truck

By-Pass Pumping Equipment

Portable Generators (as necessary)

Lighting (as necessary)

Disposable Camera

Traffic Cones

Barricades

De-Chlorinating Diffuser

De-Chlorinating Tablets

Kitty Litter

Boom

Five-Gallon Bucket

Neoprene Mats

Straw Bails

Plat Maps

7. Safety

See General Work Safety SOP

When responding to SSOs, the utility maintenance crew, or standby crew, are to observe all safety precautions as expected for any service call. Traffic vests, cones, and flashing lights are to be used for traffic control safety. Barricades are to be used as needed to protect the public safety. Additionally, all utility maintenance crew are to keep current on Hepatitis B and Tetanus immunizations.

8. Procedure

SSOs will be reported to Public Works Dispatch during business hours (408) 586-2600, and the Milpitas Police Department Dispatch (408) 586-2400 or 9-1-1, after normal business hours and holidays.

Upon notification of an SSO, Dispatch will contact the utility maintenance crew or after hours standby crew to respond.

The first responder is to determine if the discharge has reached drainage channel or surface waters. If so, contact the responsible LRO immediately.

Place lighting, traffic and crowd control measures as appropriate. Maintenance Crew safety and the safety of the general public will be the first priority when responding to an SSO.

**Determine if it is more effective to set up sewer overflow barricades around storm drains, private property, etc., FIRST, or if it is more effective to just clear the blockage and clean up later. If the spill is large or in a sensitive area, document conditions upon arrival with photographs. The guidance for this decision is:

- Small spills – proceed with clearing the blockage.
- Moderate or large spills where containment is anticipated to be simple – proceed with the containment measures.
- Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.

Using plat map, locate the direction of sewage flow.

If the cause is determined to be a blockage, locate the nearest manhole downstream of the blockage.

Remove manhole cover.

Insert hydro vacuum into manhole. (See Hydro Vacuum SOP or manual for operating instructions)

Clear the blockage to clear the sewer line and stop the overflow of sewage.

Using kitty litter, boom, five-gallon bucket, neoprene mats, straw bails, or any other means to immediately stop/block the spill from reaching the storm drain or any other exposed channel of water. The utility maintenance crew shall respond appropriately to the spill with regard to the *Sanitary Sewer Overflow and Backup Response Plan, Field Guide*, as developed by the City of Milpitas/ABAG.

Once the spill is blocked from reaching the storm drain/or other receiving waters, assess the volume and the ultimate disposition of sewage (fully-captured or reaching storm drain/waters of the State). Determine whether the spill is a Category 1, 2 or 3.

Spill Categories and Definitions:

Category 1

Discharges of untreated or partially treated wastewater of any volume that reach surface water and/or reach a drainage channel tributary to a surface water or reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system.

Category 2

Discharges of untreated or partially treated wastewater of 1,000 gallons or greater that do not reach surface water, a drainage channel or MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

Category 3

All other discharges of untreated or partially treated wastewater.

***If spill is calculated to be near 1,000 gallons (900+ gallons), err on the side of caution and report the spill to the LRO immediately.**

If a spill is classified as Category 1, IMMEDIATELY contact the Primary LRO, and if not available contact the Secondary LRO, and if unavailable, the Contingent LRO.

Primary LRO: Glen Campi, Public Works Manager

Business Hours: 408-586-2643 After Hours: 408-690-3617
408-699-8463

Secondary LRO: Steven Machida, Principal Utility Engineer

Business Hours: 408-586-3355 After Hours: 408-658-4841

Contingent LRO: Jeff Moneda, Public Works Director/City Engineer

Business Hours: 408-586-3345 After Hours: 408-908-0086
408-586-2603

When the spill is secured, take photos at arrival, during the stoppage, at the clearance of the blockage and repair and clean up. Be as thorough as possible in documentation!

Check the area of pipe/manhole in question and make modifications to the sanitary sewer system as necessary, whether temporary or permanent, to prevent another overflow in the same location.

Using the Hydro, vacuum up any sewage and return it to the sanitary sewer system.

Using the de-chlorinating diffuser, decontaminate the area affected by the overflow, including private property. Take precaution to ensure no further damage is done to private property.

Vacuum up any water generated by the clean up and return it to the sanitary sewer system.

Interview parties witness to the overflow when possible to determine cause of overflow, duration of overflow, and any other relevant facts pertaining to the overflow. Note any witness contact information.

Open the pre-packaged *Sanitary Sewer Overflow Envelope*. The packet is located in all utility maintenance vehicles.

Fill out the *SSO Report* on page *OP-2*.

Post public warnings as necessary (Contact the Utility Engineer/Assistant City Engineer before posting). Door hangers and pre-printed notices for posting are in the *Sanitary Sewer Overflow Envelope* in the utility maintenance vehicles.

After filling out the *SSO Report* page *OP-2*, fill out the first page of the SSO Packet and turn it into the LRO ASAP.

Fill out, in as much detail as possible, the Public Works Customer Service Request form, or, in the case of Standby, fill out the Standby Report with as much detail as possible. Turn it into the Administrative Analyst.

The LRO will determine what regulatory agencies the SSO needs to be reported to and how quickly based on the circumstances of the SSO.

9. Documentation

- Pre-packaged Sanitary Sewer Overflow Packet & SSO Report
- Any documentation that can support the proof of containment (i.e. photos, hydro vacuum measurement).
- Calculation of spill measurement to determine size of SSO, applicable photos.
- Contact Information for witnesses/reporting parties.
- Completed Customer Service Request generated by initial report of SSO.
- Completed Standby Report (as applicable)

10. References

Attached: ABAG Sanitary Sewer Overflow and Backup Response Plan

Sanitary Sewer Overflow (SSO) Regulatory Reporting

1. Policy

It is the policy of the Public Works Department to report all sewer system overflows (SSOs) according to the current State's Waste Discharge Requirements (WDR) and the corresponding Monitoring and Reporting Program (MRP).

2. Objective and scope

The objective of the SSO Reporting SOP is to provide instruction to the Legally Responsible Official(s) (LRO) as to how, and when, to report an SSO in order to stay in compliance with the State Water Resource Control Board's WDR, Order No. 2006-0003-DWQ, the subsequent MRP Order No. WQ 2013-0058-EXEC.

3. Regulatory Agencies

Department of Fish & Wildlife

California Office of Emergency Services (Cal OES)

San Francisco Regional Water Quality Control Board, Region 2, (RWQCB)

Santa Clara County Environmental Health Services (SCC Environmental Health Services)

State Water Resource Control Board (SWRCB)

4. Definitions

Legally Responsible Official (LRO): Designated City Personnel responsible for reporting SSOs within the pre-determined deadlines.

Sanitary Sewer Overflow (SSO): Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

CIWQS: California Integrated Water Quality System, State database for reporting SSOs.

5. Roles and responsibilities

Call Center – Department of Public Works call center during business hours and Milpitas Police Department after hours.

Public Works Maintenance Crew/Standby Crew – Perform preventive maintenance activities, mobilize and respond to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators).

Standby Crew: After hours (5:00 p.m. to 7:00 a.m.) maintenance crew assigned to respond to emergency field calls. Standby crew is trained in utility maintenance activities and emergency utility response.

Public Works Manager (Primary LRO) – Manages field operations and maintenance activities, provides relevant information to management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs, and trains field crews.

Principal Utility Engineer (Secondary LRO) – Oversees and prepares wastewater collection system planning documents, documents new and rehabilitated assets, proposes rate analysis reports and staff recommendations, and coordinates development and implementation of SSMP

Public Works Director/City Engineer (Contingent LRO) – Establishes sewer system plans strategy, leads and assigns duties of engineering staff, prepares budgets and serves as public information officer.

6. Reporting Tools

ABAG Kit: City of Milpitas SSO and Backup Response Plan, 2012

- Completed SSO Report OP-2A
- Regulatory Notifications Packet, RN

Cal OES (800) 852-7550

SCC Health Department Fax (408) 258-5891

Fax Machine

Computer

Web address: <http://ciwqs.waterboards.ca.gov/>

Login/Passwords:

Primary LRO	Public Works Manager
Secondary LRO	Principal Utility Engineer
Contingent LRO	Public Works Director/City Engineer

7. Procedure

7.1 Dispatch/MPD will notify maintenance/standby crew of SSO, who will then assess SSO category based on the following criteria:

Spill Categories and Definitions:

Category 1

Discharges of untreated or partially treated wastewater of any volume that reach surface water and/or reach a drainage channel tributary to a surface water or reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system.

Category 2

Discharges of untreated or partially treated wastewater of 1,000 gallons or greater that do not reach surface water, a drainage channel or MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

Category 3

All other discharges of untreated or partially treated wastewater.

7.2 Maintenance/Standby crew to notify the assigned LRO:

Primary LRO: Glen Campi, Public Works Manager

Business Hours: 408-586-2643 After Hours: 408-690-3617
408-699-8463

Secondary LRO: Steven Machida, Principal Utility Engineer

Business Hours: 408-586-3355 After Hours: 408-658-4841

Contingent LRO: Jeff Moneda, Public Works Director/City Engineer

Business Hours: 408-586-3345 After Hours: 408-908-0086
408-586-2603

7.2 **If Category 1 classified, fill out the top portion of the Regulatory Notification Packet, RN-3, *SSO Description* and begin the 2 hour reporting notification required (within 2 hours of spill notification):**

CalOES*

Phone (800) 852-7550

*Per attached email from Claudia Villacorta, RWQCB, CalOES will notify the RWQCB. No notification on City's part necessary.

*****Be sure to get CalOES Control Number.**

SCC Health Dept. Fill out and fax form RN-2 to (408) 258-5891

Additional agency reporting requirements will vary by agency. See ABAG Kit: *SSO and Backup Response, Regulatory Notifications Packet, RN-1, Side B* for a list of additional reporting agencies and requirements.

7.3 Once notifications have been made, complete Form RN-3, *SSO 2-Hour Notification Summary*

7.4 Once the spill has been contained, cleaned and repaired, the Maintenance Crew will fill out the ABAG Kit: *SSO Report, OP-2, Side A*.

7.5 The maintenance crew will pass the ABAG Kit: *SSO Report, OP-2, Side A* to the LRO.

7.6 **Reporting to the SWRCB:**

The LRO will report the spill to the SWRCB according to the timeline below:

SWRCB Reporting Timetable:

Category 1 SSOs: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.

Category 2 SSOs: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.

Category 3 SSOs: Submit certified report within 30 calendar days of the end of month in which SSO occurred.

7.7 **SWRCB Reporting Instructions:**

Go to <http://ciwqs.waterboards.ca.gov/>, the SWRCB Database.

Using the login and passwords above, the LRO will log in.

Select “SSO – Sanitary Sewer Overflows”

Select “Reporting New SSO”

Following the website, enter as much information as possible known about the SSO from the ABAG Kit: *SSO Report, OP-2, Side A*, or from first-hand personal knowledge. If any additional first hand knowledge of the spill is not included on the SSO Report, make a note and attach it to the hard copy report. Please include your name. *The report can be submitted incomplete, to be completed with 15 days post-spill. See 7.8 if necessary.*

When complete, click “Submit”.

Print a copy of the report to keep for records.

Forward the full report, completed ABAG Forms, pictures, etc., to Glen Campi

7.8 **Incomplete SWRCB Reports:**

Information may be added or corrected at a later date. To do so:

Re-login, select “SSO – Sanitary Sewer Overflows”

Select “Modify Existing SSO”

Enter in incident search criteria, for example, incident date or location, and select “Search”.

Select the incident from the list and make amendments as necessary.

A final certified report must be completed in CIWQS within 15 days of the SSO incident.

7.9 The reporting LRO will notify the other LRO's of the spill and reporting status ASAP.

8. Documentation

- ABAG Kit: SSO and Backup Response Plan:
 - Faxed documentation to SCC Dept. of Environmental Health, RN-2
 - SSO 2-Hour Notification Summary, RN-3
 - SSO Report, OP-2, Side A
- Print and maintain a hard copy of certified report to CIWQS as proof of submission.
- CalOES Control Number (upon CalOES Reporting)

9. References

ABAG Kit: SSO and Backup Response Plan

State Water Resource Control Board, MRP Order No. WQ 2013-0058-EXEC

Email of reporting direction from Claudia Villacorta, regarding RWQCB requirements

SWRCB Website Documentation regarding RWQCB reporting

Appendix C

ABAG SSO & Backup Reponse

City of Milpitas

Sanitary Sewer Overflow and Backup Response Plan



Prepared by David Patzer, DKF Solutions Group
707.373.9709 losscontrol@sbcglobal.net
Copyright © 2004-2012

**Sanitary Sewer Overflow and Backup
Response Plan
Table of Contents**

Response Plan Binder (PB)

Purpose, Policy and Definitions **PB-1**
 Sewer Overflow/Backup Response Summary-2
 Receiving a Sewage Overflow/Backup Report-3

Field Guide (FG)

Customer Relations Practices Following a Sewer Backup **FG-1**
 Line Clearing SOPs
 How To Use a HydroflusherFG-2.1
 How To Use a Continuous Rodder-2.2
 Containment ProceduresFG-3
 Flow Volume Estimation Procedures
 Contained Volume.....FG-4.1
 Contained in Roadway Gutter-4.2
 Counting Upstream Connections-4.3
 Bypass Pump Selection Tables
 0-25 Feet Total LiftFG-5.1
 25-50 Feet Total Lift-5.2
 Determining Overflow Rates From a Manhole
 Flow From a Manhole Picture MatchingFG-6.1
 Flow From a Manhole With Cover in Place Tables.....-6.2
 Flow From a Manhole With Cover Removed Tables-6.3
 Flow From a Manhole Pick Hole Tables-6.4
 Sewer Overflow Response Tactics GuideFG-7
 Emergency Vendor Contact InformationFG-8
 Internal Contact InformationFG-9

Regulatory Notifications Packet (RN)

Instructions Envelope
 Guide to Reporting to Regulatory Authorities **RN-1**
 Fax Reporting Form: To Water Board.....-2
 Fax Reporting Form: To Local Health Agency.....-3
 SSO 2-hr Notification/24-hr Certification Worksheet-4

Field Sampling Kit (FS)

Procedures for Sampling Receiving Waters and Posting
 Warnings after a Sewage Spill **FS-1**
 Sample Collection Chain of Custody Record.....-2
 Kit Contents..... n/a
 Cooler w/ice pack
 Latex gloves
 Safety glasses
 20 Sample bottle labels
 Waterproof Pen (i.e. Sharpie®)
 10 Total/Fecal/Enterococcus Coliform sample bottles (100ml sterilized bottle)
 Disposable Camera
 Chain of Custody Form

Sewer Backup Packet (BP)

Response Instructions..... envelope label
 Response FlowchartBP-1
 First Responder Form-2

Claims Submittal Checklist.....	-3
Sewer Lateral CCTV Report	-4
Sanitary Sewer Overflow Report.....	-5
Collection System Failure Analysis Form	-6
Sewer Overflow Report.....	-Form
Customer Service Packet	
Instructions.....	-envelope
Customer Information letter	CS-1
Claim Form.....	-2
Sewer Spill Reference Guide	pamphlet
Sewer Maintenance Door Hangar.....	n/a
Sewer Spill Reference Guide	pamphlet

Sanitary Sewer Overflow Packet (OP)

Instructions and Chain of Custody	Envelope Label
Responding to a Sanitary Sewer Overflow	OP-1
Sewer Overflow Report	-2
Collection System Failure Analysis Form	-3
Sewer Spill Reference Guide	pamphlet
Sewer Maintenance Door Hangar.....	n/a

Miscellaneous

- Public Posting
- Sewer Maintenance Door Hanger
- Sewer Spill Reference Guide

PURPOSE

The purpose of the Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within the City's service area.

POLICY

It is the policy of the Utility Maintenance Department to respond quickly and effectively to the report of a sanitary sewer overflow (SSO). Employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, relieve the cause of the overflow, and ensure the area is cleaned as soon as possible to minimize health hazards to the public and protect the environment.

OBJECTIVE AND SCOPE

The objective of the Sewer Spill Overflow SOP is to have a clear and concise response plan in place in the event of a sewer spill emergency so that all precautions are taken to preserve public health, property and the environment. When an overflow occurs, maintenance crews shall take all feasible steps and necessary remedial action 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. Furthermore, this SOP documents the necessary steps to be taken post-sewer spill, specifically the reporting requirements to the regulatory agencies. The general scope of this SOP covers from the initial report of a spill, the containment and clean up, to the reporting requirements following the response.

DEFINITIONS AS USED IN THIS SANITARY SEWER OVERFLOW & BACKUP RESPONSE PLAN

Legally Responsible Official (LRO): Designated City Personnel responsible for reporting SSOs within the pre-determined deadlines to the appropriate regulatory agencies.

Nuisance - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements: a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.; b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; c. Occurs during, or as a result of, the treatment or disposal of wastes.

Private Lateral Sewage Discharges – Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

Sanitary Sewer Overflow (SSO) - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- (i) Overflows or releases of untreated or partially treated wastewater that reach surface water or reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system;
- (ii) Overflows or releases of untreated or partially treated wastewater for 1,000 gallons or greater that do not reach surface waters; and
- (iii) All other discharges of untreated or partially treated wastewater

NOTE: *Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not SSOs.*

SSO Categories -

Category 1: Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that 1) Reach surface water and/or reach a drainage channel tributary to a surface water; or 2) Reach a Municipal Separate Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).

Category 2: Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition

Sanitary sewer system – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

Untreated or partially treated wastewater – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

ROLES AND RESPONSIBILITIES

Call Center – Department of Public Works call center during business hours and Milpitas Police Department after hours.

Public Works Maintenance Crew/Standby Crew – Perform preventive maintenance activities, mobilize and respond to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators).

Standby Crew: After hours (5:00 p.m. to 7:00 a.m.) maintenance crew assigned to respond to emergency field calls. Standby crew is trained in utility maintenance activities and emergency utility response.

Public Works Manager (Primary LRO) – Manages field operations and maintenance activities, provides relevant information to management, prepares and implements contingency plans, leads emergency response, investigates and reports SSOs, and trains field crews.

Principal Utility Engineer (Secondary LRO) – Oversees and prepares wastewater collection system planning documents, documents new and rehabilitated assets, proposes rate analysis reports and staff recommendations, and coordinates development and implementation of SSMP.

Public Works Director/City Engineer (Contingent LRO) – Establishes sewer system plans strategy, leads and assigns duties of engineering staff, prepares budgets and serves as public information officer.

REGULATORY REQUIREMENTS FOR OERP ELEMENT OF SSMP

RWQCB Requirement

The collection system agency must develop an overflow emergency response plan that provides procedures for SSO notification, response, reporting, and impact mitigation.

GWDR Requirement

The collection system agency 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 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 Monitoring and Reporting Program(MRP). All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board Waste Discharge Requirements or National Pollutant Discharge Elimination System (NPDES) permit requirements. The Sewer System Management Plan 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) Procedures 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 untreated wastewater and prevent discharge of untreated wastewater to Waters of the United States 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.

GOALS

The City's goals with respect to responding to SSOs are:

- Respond quickly to minimize the volume of the SSO;
- Eliminate the cause of the SSO;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO; and
- Meet the regulatory reporting requirements.

SSO DETECTION

The processes that are employed to notify the City of the occurrence of an SSO include: observation by the public, receipt of an alarm, or observation by City Staff during the normal course of their work.

PUBLIC OBSERVATION

Public observation is the most common way that the City is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are on the City's website: <http://www.ci.milpitas.ca.gov/government/pworks/default.asp>. The City's telephone number for reporting sewer problems during normal business hours is 408.586.2600. After hours reporting parties should call the Milpitas Police Department at 408.586.2400.

Normal Work Hours

The City's regular working hours are Monday through Friday from 7:00 a.m. to 5:00pm, except holidays. When a report of a sewer spill or backup is made during normal work hours, City staff receives the call, takes the information from the caller, and communicates it to the field crew.

After Hours

After normal business hours, reporting parties are advised via the Public Works voicemail system to call the Milpitas Police Department, who will take the information from the caller, page the Standby Employee, and communicate the necessary information to the Standby Employee.

City Staff Observation

City staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate City staff who, in turn, respond to emergency situations. Work orders are issued to correct non-emergency conditions.

SSO RESPONSE PROCEDURES

First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Primary, Secondary or Contingent LRO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when City personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job. Additionally, all utility maintenance crew are to keep current on Hepatitis B and Tetanus immunizations.

Initial Response

The first responder must respond to the reporting party/problem site and visually check for potential sewer stoppages or overflows.

The first responder should:

- Note arrival time at the site of the overflow/backup.
- Verify the existence of a sewer system spill or backup.
- Identify and assess the affected area and extent of spill.
- Contact caller if time permits.
- If the spill is large or in a sensitive area, document conditions upon arrival with photographs. Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
 - Small spills – proceed with clearing the blockage.
 - Moderate or large spill where containment is anticipated to be simple – proceed with the containment measures.
 - Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.

Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not recur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If assistance is required, immediately contact other employees, contractors, and equipment suppliers.

Initiate Spill Containment Measures

The first responder should attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure/pump station.

WATER QUALITY SAMPLING AND TESTING

Water quality sampling and testing is required whenever spilled sewage enters a water body and is performed to determine the extent and impact of the SSO. The water quality sampling procedures are:

- The first responders should collect samples as soon as possible after the discovery and mitigation of the SSO event.
- The water quality samples should be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g. creeks). The water quality samples should be collected near the point of entry of the spilled sewage.
- The samples shall then be brought to the City's Wastewater Treatment Plant and placed in the SSO/Sample refrigerator.

RECOVERY AND CLEAN-UP

The recovery and clean-up phase immediately begins when the flow has been restored and the spilled sewage has been contained to the extent possible. The SSO recovery and clean-up procedures are:

Estimate the Volume of Spilled Sewage

Use the methods outlined the Field Guide to estimate the volume of the spilled sewage. Wherever possible, document the estimate using photos of the SSO site before and during the recovery operation.

Recovery of Spilled Sewage

Vacuum up and/or pump the spilled sewage and discharge it back into the sanitary sewer system.

Clean-up and Disinfection

Clean up and disinfection procedures should be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry

weather conditions and should be modified as required for wet weather conditions. Where clean up is beyond the capabilities of City staff, a clean up contractor will be used.

Private Property

City crews are responsible for the clean up when the property damage is minor in nature and is outside of private building dwellings. In all other cases, affected property owners can call a water damage restoration contractor to complete the clean up and restoration. If the overflow into property is the definite cause of City system failure, the property owner can call out a water damage restoration contractor to complete the clean up and restoration. In both cases, City claim forms may be issued if requested by the property owners.

Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. Take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume should be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways

The Department of Fish and Game should be notified in the event an SSO impacts any surface water. Fish and Game will provide the professional guidance needed to effectively clean up spills that occur in these sensitive environments. Clean up should proceed quickly in order to minimize negative impact. Sewage causes depletion of dissolved oxygen, which will kill aquatic life. Any water that is used in the clean up should be de-chlorinated prior to use.

Wet Weather Modifications

Omit flushing and sampling during heavy storm events with heavy runoff where flushing is not required and sampling would not provide meaningful results.

PUBLIC NOTIFICATION

Post signs and place barricades to keep vehicles and pedestrians away from contact with spilled sewage. Do not post or remove the signs until directed by the City Engineer/Public Works Director, County Environmental Health or designee.

Creeks or streams that have been contaminated as a result of an SSO should be posted at visible access locations until the risk of contamination has subsided to acceptable background levels. The warning signs, once posted, should be checked every day to ensure that they are still in place.

In the event that an overflow occurs at night, the location should be inspected first thing the following day. The field crew should look for any signs of sewage solids and sewage-related material that may warrant additional clean up activities.

FAILURE ANALYSIS INVESTIGATION

The objective of the failure analysis investigation is to determine the "root cause" of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to recur.

The investigation should include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation should include:

- Reviewing and completing the Sewer Overflow Report,
- Reviewing past maintenance records,
- Reviewing available photographs,
- Conducting a CCTV inspection to determine the condition of the line segment immediately following the SSO and reviewing the video and logs, and
- Interviewing staff that responded to the spill.

The product of the failure analysis investigation should be the determination of the root cause and the identification of the corrective actions. The Collection System Failure Analysis Form (*BP-5 and OP-3*) should be used to document the investigation.

POST SSO EVENT DEBRIEFING

Every SSO event is an opportunity to evaluate the response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, and other parameters.

As soon as possible after major SSO events, all of the participants, from the person who received the call to the last person to leave the site, should meet to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future SSO events. The results of the debriefing should be recorded and tracked to ensure the action items are completed.

EQUIPMENT

This section provides a list of specialized equipment that is required to support this Overflow Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all SSOs from gravity sewers.
- *Camera* -- A digital or disposable camera is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools should include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate an SSO.
- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the SSO event.

SSO RESPONSE TRAINING

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

Initial and Annual Refresher Training

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow should receive training on the contents of this OERP. All new employees should receive training before they are placed in a position where they may have to respond. Current employees should receive annual refresher training on this plan and the procedures to be followed.

SSO Response Drills

Periodic training drills should be held to ensure that employees are up to date on the procedures, the equipment is in working order, and the required materials are readily available. The training drills should cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, force main failure, pump station failure, and lateral blockage). The results and the observations during the drills should be recorded and action items should be tracked to ensure completion.

SSO Training Record Keeping

Records should be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event and should include date, time, place, content, name of trainer(s), and names of attendees.

Contractors Working On City Sewer Facilities

All contractors working on City sewer facilities will be required to develop a project-specific OERP. All contractor personnel will be required to receive training in the contractor's OERP and to follow that OERP in the event that they cause or observe an SSO.

AUTHORITY

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Game Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ

Sewer Maintenance Crew performs the following:

Follow the instructions on the Sanitary Sewer Overflow Packet:

- Notify supervisor or designee of the incident
- Relieve blockage and clean impacted areas
- Perform required regulatory reporting in accordance with the Regulatory Notifications Packet (*inside the Sewer Overflow Packet*)
- Forward completed Sanitary Sewer Overflow Packet the Public Works Manager or Designee

Sewer Maintenance Crew performs the following:

Follow the instructions on the Sanitary Sewer Backup Packet:

- Notify supervisor or designee of the incident
- Relieve blockage and clean impacted areas outside the private structure
- Contact ABAG PLAN, as appropriate
- Perform required regulatory reporting in accordance with the Regulatory Notifications Packet (*inside the Sewer Overflow Packet*)
- Forward completed Sanitary Sewer Backup Response Envelope to the Public Works Manager.

Finance Director/Risk Manager or Designee performs the following:

1. Review incident reports, claim form and other incident information and forward, as appropriate, to:
 ABAG Plan Corporation Attn: Bruce Carey,
 Claims Examiner
 P.O. Box 2050, Oakland, CA 94604-2050
 Telephone: (510) 464-7946
 Fax: (510) 464-7989
2. Communicate with claimant, as appropriate, and ABAG Plan to adjust and administer the claim to closure

Receive notification of Overflow/ Backup or Unauthorized Discharge

NO Has the overflow impacted private property?

YES

YES Is it possible the overflow/backup is due to a failure in the City-owned/maintained sewer lines?

NO

Sewer Maintenance Crew performs the following:

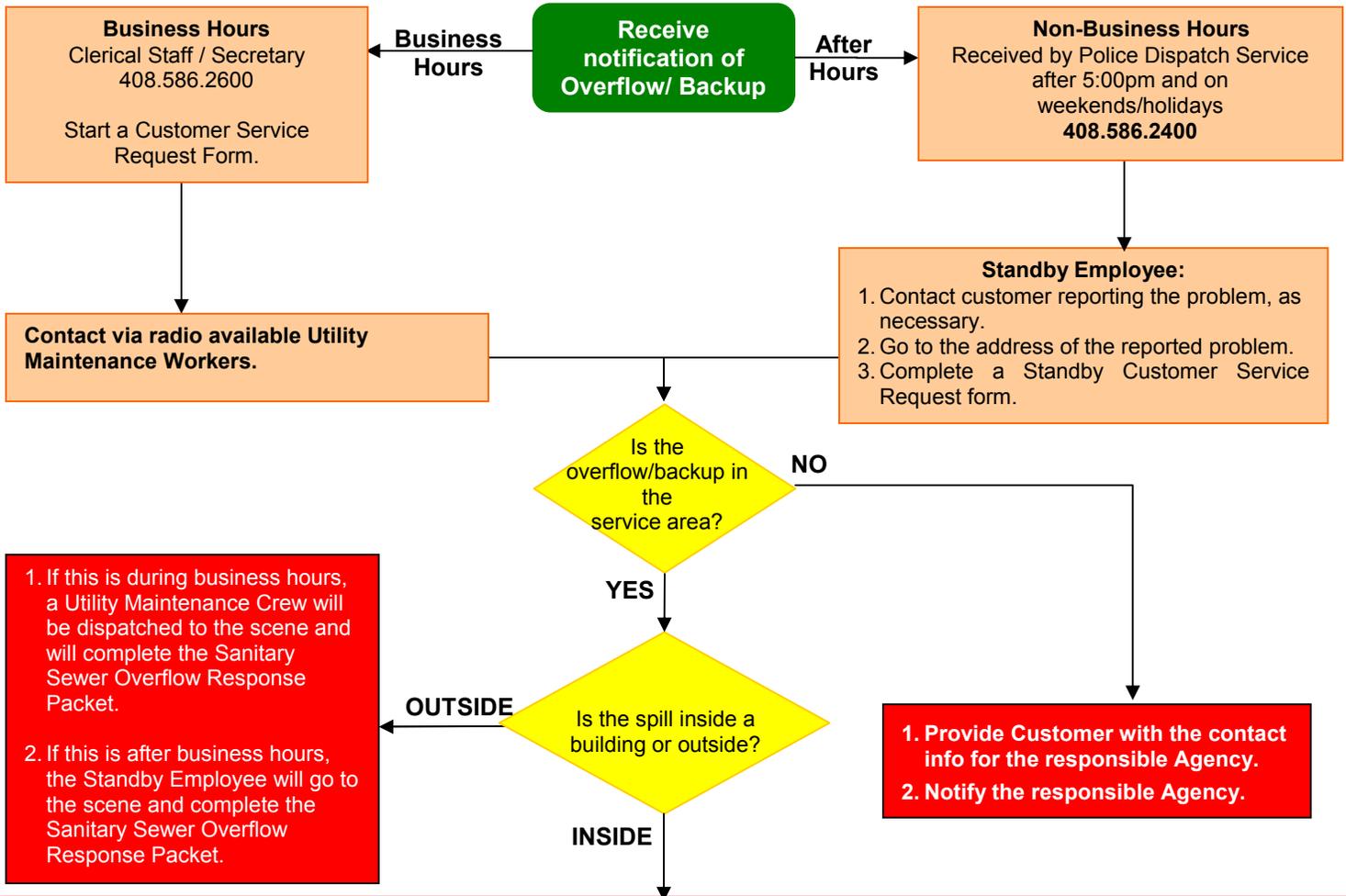
Follow the instructions on the Sanitary Sewer Backup Packet:

If customer is not home:

- Complete Door Hanger and leave on customer's door

If customer is home:

1. Explain to customer that the blockage is in their lateral and that the City does not have legal authority to maintain or perform work on privately owned laterals.
2. Recommend to customer they hire a contractor to clear their line.
3. Give customer the Sewer Spill Reference Guide pamphlet.



WHAT TO TELL THE CUSTOMER (See Field Guide for tips)

- Clearly communicate who will respond, estimated time they will arrive and what area(s) will need to be accessed.
- Clearly communicate that a blockage in the sewer main line will be promptly cleared, but that the City is **not allowed to work on a blockage in the property owner's/resident's service lateral line**. Use general terms that the caller can understand, and give the caller your name for future reference.
- Show concern and empathy for the property owner/resident, **but do not admit or deny liability**.
- Instruct the caller to turn off any appliances that use water and to shut off any faucets inside the home.
- Instruct the caller to keep all family members and pets away from the affected area.
- Instruct the caller to place towels, rags, blankets, etc. between areas that have been affected and areas that have not been affected.
- Instruct the caller to not remove any contaminated items – *let the professionals do this*.
- Instruct the caller to turn off their HVAC system.
- Instruct the caller to move any **uncontaminated** property away from impacted areas.

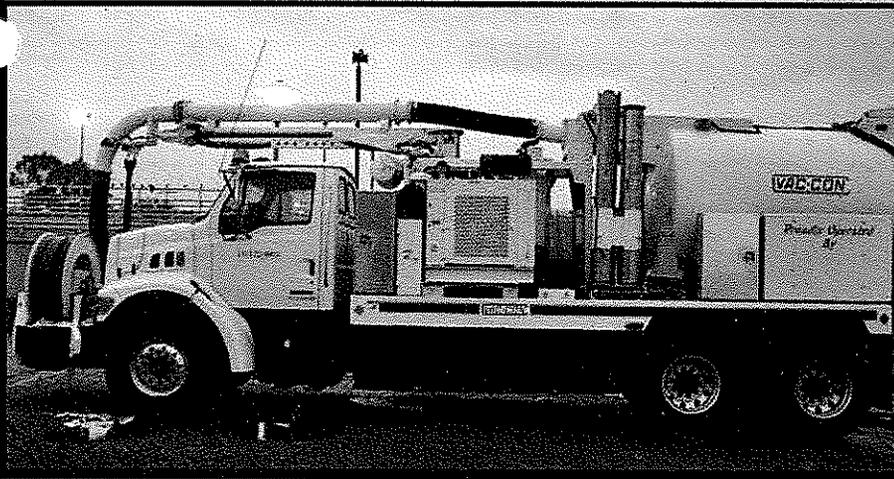
1. If this is during business hours, a Utility Maintenance Crew will be dispatched to the scene and will complete the Sanitary Sewer Overflow Response Packet.

2. If this is after business hours, the Standby Employee will go to the scene and complete the Sanitary Sewer Overflow Response Packet.

City of Milpitas

Sanitary Sewer Overflow and Backup Response Plan

Field Guide



Prepared by David Patzer, DKF Solutions Group
707.373.9709 losscontrol@sbcglobal.net
Copyright © 2004-2008

Sanitary Sewer Overflow and Backup Response Plan

© COPYRIGHT 2004-2008
DKF Solutions Group
All rights reserved.

All material contained in this program is protected and may not be reproduced without the express, written consent of DKF Solutions Group. This program, including procedures, forms and letters was created by DKF Solutions Group (except where otherwise cited) and may not be shared, loaned or otherwise given, in part or in whole, to any entity, company or organization except regulatory agencies, without the express, written consent of DKF Solutions Group. DKF Solutions Group and the Agency indicated on the cover page are the only authorized entities allowed to alter or reproduce this document for the Agency's internal use.

In the development of this program, a concerted professional effort was made to ensure the accuracy of the contents; however, no warranty is express or implied. This program should not be regarded as a substitute for the advice and counsel of an attorney.

For any questions regarding the copyright or contents of this program, contact DKF Solutions Group at 707.373.9709 or at losscontrol@sbcglobal.net.

What do you need?	Then go to...
Customer Relations Practices	FG-1
How to Use a Hydroflusher to Clear a Line Blockage.....	-2
Containment Procedures.....	-3
Flow Volume Estimation Procedures	
Contained Volume	FG-4.1
Contained in Roadway Gutter.....	-4.2
Duration and Flow Rate.....	-4.3
Bypass Pump Selection Tables	
0-25 Feet Total Lift	FG-5.1
25-50 Feet Total Lift	-5.2
Determining Flow Volume	
Flow from a Manhole.....	FG-6.1
Table 1: Manhole Cover in Place.....	-6.2
Table 1 Formula/Drawing	-6.3
Table 2: Manhole Cover Removed.....	-6.4
Table 2 Formula/Drawing	-6.5
Table 3: Out of Manhole Pick Hole.....	-6.6
Table 3 Formula/Drawing	-6.7

CUSTOMER RELATIONS

It is important for employees to communicate effectively with customers, especially in sewage backup situations. How we communicate - on the phone, in writing, or in person - is how we are perceived. Good communication with the homeowner results in greater confidence in our ability to address the problem satisfactorily, less chance of having the homeowner prolong the claims process, and less chance of him/her exaggerating the damage done to their property.

As a representative of your agency, you will occasionally have to deal with an irate homeowner. A sewer backup is a stressful event and even a reasonable homeowner can become irate should he/she perceive us as being indifferent, uncaring, unresponsive, or incompetent.

Although sometimes difficult, effective management of a sewage backup situation is critical. If it is not managed well, the situation can end up in a costly prolonged process with the homeowner. We want the homeowner to feel assured that we are responsive and the homeowner's best interest is a top priority.

A Few Communication Tips

1. Give the homeowner ample time to explain the situation or to vent. Show interest in what the homeowner has to say, no matter how many times you have heard it before, or how well you understand the problem.
2. As soon as possible, let the customer know that you will determine if the source of the sewer backup is in the sewer main and, if it is, will have it corrected as quickly as you can.
3. Acknowledge the homeowner's concerns. For example, if the homeowner seems angry or worried about property damage, say something like, "I understand you're concerned about the possible damage to your property, but a professional cleanup crew can restore the area, and if it is determined that the agency is at fault, the property owner has the right to file a claim for any reasonable repairs or losses resulting from this incident."
4. Express understanding and empathy for any inconveniences caused by the incident, but do not admit fault.
5. As much as possible, keep the homeowner informed on what is being done and will be done to correct the problem.
6. Keep focused on getting the job done in a very professional manner. Focus on the problem without unnecessary small talk with the homeowner.
7. Don't find fault or lay blame on anyone.

FOLLOW ALL REQUIRED SAFETY PROCEDURES!

- Ensure all employees are equipped and use all appropriate Personal Protective Equipment (PPE)
- Ensure all necessary traffic controls are in place
- Ensure all safety program requirements are observed (i.e. Confined Space, Manhole Hazards, Respiratory Protection, etc)

Check up & downstream manholes to identify the location of the blockage

STEP 1 – SETUP

- ❑ Position vehicle/sewer-cleaning equipment at downstream manhole from blockage.
On steep lines where the downstream manholes are less than 5 feet deep, necessary precautions to prevent secondary overflows at downstream manholes must be taken. Form a containment barricade near the downstream manhole with use of sandbags, etc.
- ❑ Position the water jet over the 1st empty manhole below the blockage
- ❑ Attach a leader hose (a hose of a different color) to the regular hose – this serves as a benchmark for insertion & retrieval (NOTE: A leader hose helps prevent the hose from exiting the pipe prematurely & causing injury!)
- ❑ Select a PENETRATING nozzle with a small angle (i.e. 15-degrees) for blockages
- ❑ Install a nozzle extension between the end of the hose & the nozzle to prevent the nozzle and hose from turning up a service lateral
 - IF USING A ROLLER GUIDE: Lower it into the manhole & lock it into place
 - IF USING A TIGER TAIL: Insert the jet hose through it & tie the device in place to stabilize it
- ❑ Lower the hose, nozzle extension & nozzle into the manhole & into the pipe invert
 - IF USING A ROLLER GUIDE: Insert the hose as far as possible into the pipe before using the lower roller guide & engaging the water pressure – 3-feet is minimum!

STEP 2 – HYDROFLUSHING

- ❑ Run the line with just enough pressure to reach the blockage. When you reach the blockage, the hose should stop.
- ❑ Adjust the water pressure to the level appropriate for this type of blockage, pipe and situation.
NOTE: In sewer lines where property owner toilets have bubbled or overflowed due to high pressure back flushing, a lower pressure must be used to prevent additional backups
- ❑ If the hose does not advance, pull back on it and then let go. Repeat the steps until the hose breaks through the blockage.
- ❑ If the hose breaks through and the line is still plugged, run the hose until you hit another plug, then repeat the steps again.
- ❑ Clear the blockage by working from the lower end to the higher end of the flow
NOTE: Always jet the line a few feet at a time, returning the debris to the manhole - remove debris so further blockages are not created downstream
- ❑ Once you hear or see the rush of the water, turn off the pressure until the water level drops in the line. Once the flow is back to normal, run the hose up to the next manhole to insure that the line is free of all blockages, then pull the hose back. Check the upstream manholes to make sure the line is running.
- ❑ Always rewind the jet hose with the water pressure on to avoid flattening the hose.
NOTE: Always turn off the water pressure once you see the leader hose – failure to do so may result in serious injury!

The overflow must be contained. Containment becomes more difficult if the overflow reaches the storm drain system or drainage way since the overflow can rapidly contaminate receiving waters such as creeks, streams, rivers, and other water bodies. During dry weather, the storm drain system can be used to store the overflow if it can be plugged downstream of the overflow or if the downstream storm drain pump station can be deactivated.

Options for containing overflow

Overflow onto ground	<ul style="list-style-type: none"> • Rubber mats at catch basin or inlet • Sand bags in gutter • Dig earthen trench
Overflow in building	<ul style="list-style-type: none"> • Evacuate affected people if necessary • Use sand bags/plastic sheeting if necessary • Avoid electrical shock - have power turned off
Overflow into storm drain/drainage way	<ul style="list-style-type: none"> • Trace overflow in storm drainage system to downstream end point • Plug all affected storm system outlets and coordinate with appropriate personnel for strategy to contain spill • Turn off storm water pump station

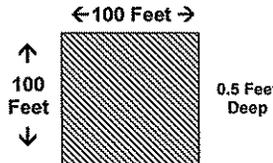
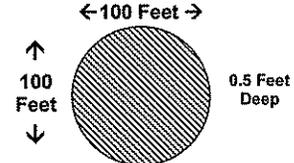
Required equipment for containing overflow

Overflow onto ground and in buildings	<ul style="list-style-type: none"> • Rubber mats • Sand bags • Plastic sheets • Bypass pumps and pipe/hose
Overflow into storm drain/drainage way	<ul style="list-style-type: none"> • Plugs • Bypass pump
Overflow at pump station	<ul style="list-style-type: none"> • Emergency generator • Bypass pump

Refer to Regulatory Notifications Packet to begin preliminary notifications.

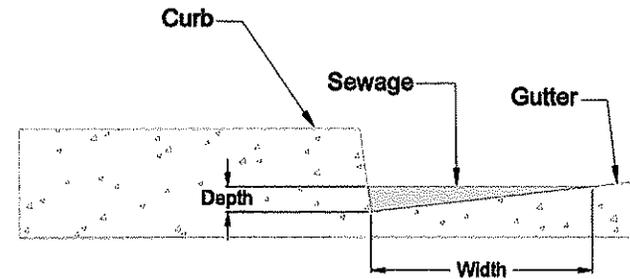
The volume of some small spills can be estimated using this method if the overflow is contained in one area and if it is not raining. In addition, the shape, dimensions, and depth of the spilled wastewater are needed. The shape and dimensions are used to calculate the area of the spills and the depth is used to calculate the volume.

- Step 1 Sketch the shape of the contained sewage
- Step 2 Measure or pace off the dimensions.
- Step 3 Measure the depth in several locations. Calculate an average depth for the entire area by adding all measured depths together and dividing by the number of measurements taken.
- Step 4 Convert the dimensions, including depth to feet.
- Step 5 Calculate the area using the following formulas:
 Rectangle Area = length x width
 Circle Area = diameter x diameter x 0.785
 Triangle Area = base x height x 0.5
- Step 6 Multiply the area times the depth
- Step 7 Multiply the volume by 7.48 to convert the area to gallons

<p>EXAMPLE:</p>  <p>Volume = 100' x 100' x 0.5' x 7.48 Volume = 37,400 gallons</p>	<p>EXAMPLE:</p>  <p>Volume = 100' x 100' x 0.5' x .785 x 7.48 Volume = 37,400 gallons</p>
---	--

The volume of an overflow contained in a roadway gutter can be estimated by following one of these methods:

- Step 1. Measure the length of gutter containing the overflow.
- Step 2. Measure the depth and width of the overflow in the gutter. Refer to the drawing below.



- Step 3. Convert all measurements to feet
- Step 4. Calculate the overflow volume using the following equation:

$$\text{Volume (gal)} = \text{length} \times \text{width} \times \text{depth} \times 3.74$$

In this method, separate estimates are made for the overflow duration and flow rate.

Flow Rate: There are four methods to estimate the overflow rate:

1. SSO Flow Estimation Pictures: Pictures presented in Tab XX of this procedure manual show sewage flowing from a maintenance hole at different rates. The observations of staff members are used to select the appropriate value from the pictures.
2. Tabulated Values: Table 1, Table 2 and Table 3 in Tab XX contain tabulated values for different maintenance hole overflows.
3. Open Channel Flow: Overflows often run into nearby ditched, channels, gutters, etc. Flow can be quantified by measuring the cross sectional area and velocity of the overflow. First measure the depth of flow and the dimensions of the channel. Then measure the velocity by dropping a floating object into the flow and measuring the time it takes to travel a set distance. The resulting velocity will be in the units of feet per second. Several measurements should be taken and the average flow rate should be used in volume estimates. Calculate the flow into the channel using the following formula:

$$\text{Flow (gal/min)} = \text{Velocity (ft/sec)} \times \text{Area (ft}^2\text{)} \times 449$$

4. Pump Stations: Sewer pump stations often have flow or pump run time data available through the SCADA system. Pump curves may need to be obtained to determine pump discharge rates.

Overflow Duration: The start and end times of the overflow can be estimated by CSD-1 staff or public bystanders who saw the overflow begin and/or end. Flow meters and information from the SCADA system can be useful in estimating overflow duration.

Volume Calculation: The overflow volume can be estimated with the following equation:

$$\text{Volume (gal)} = \text{Flow Rate (gal/min)} \times \text{Duration (min)}$$

Bypass Pump Selection Table
0-25 feet total lift

Pipe size (in)	Flowrate (gpm)	60	100	150	200	250	300	350	400	450	500	600	700	800	900	1000
18	4500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	4000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	3500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	3000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	2500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
15	2000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
15	1500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
15	1000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
10	750	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
8	500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
8	400	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
6	300	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
4	200	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
4	100	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
4	50	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"

Pipe Size (in)	Avg Flowrate (gpm)
4	270
6	314
8	486
10	764
12	1687
15	2163
18	4444

Assumptions

1. All losses are ignored except for frictional losses.
2. Velocity heads are zero because of low speeds.
3. Pump curves are from www.auldorant.com.
 - a. 3" pump DY-80 @ 2800 rpm
 - b. 4" pump DY-100 @ 2200 rpm
 - c. 6" pump DY-150 @ 2200 rpm
 - d. 8" pump DY-200 @ 1900 rpm
4. Hose diameter is same as pump size.
5. Fire hose roughness coefficient C=120.
6. Inlet and outlet pressures are at atmospheric pressure.
7. Average flowrates for pipe diameters are calculated using average slopes.
8. Maximum 25 feet suction lift.

**Bypass Pump Selection Table:
25-50 Feet Total Lift**

**FG
5.2**

**Bypass Pump Selection Table
25-50 feet total lift**

Pipe size (in)	Flowrate (gpm)	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	
18	4500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	4000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	3500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	3000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
18	2500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
15	2000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
15	1500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
15	1000	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
10	750	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
8	500	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
8	400	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
6	300	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
4	200	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
4	100	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
4	50	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"

Pipe Size (in)	Avg Flowrate (gpm)
4	270
6	314
8	486
10	754
12	1657
15	2153
18	4444

Assumptions

- All losses are ignored except for frictional losses.
- Velocity heads are zero because of low speeds.
- Pump curves are from www.rainfont.com
 - 3" pump DY-50 @ 2800 rpm
 - 4" pump DY-100 @ 2200 rpm
 - 6" pump DY-150 @ 2200 rpm
 - 8" pump DY-200 @ 1900 rpm
- Hose diameter is same as pump size.
- Fire hose roughness coefficient C=120
- Inlet and outlet pressures are at atmospheric pressure.
- Average flowrates for pipe diameters are calculated using average slopes.
- Maximum 50 feet suction lift.

**Determining Flow Volume:
Flow from a Manhole**

**FG
6.1**

**Reference Sheet for Estimating Sewer Flow Rate
From Overflowing Sewer Maintenance Holes**

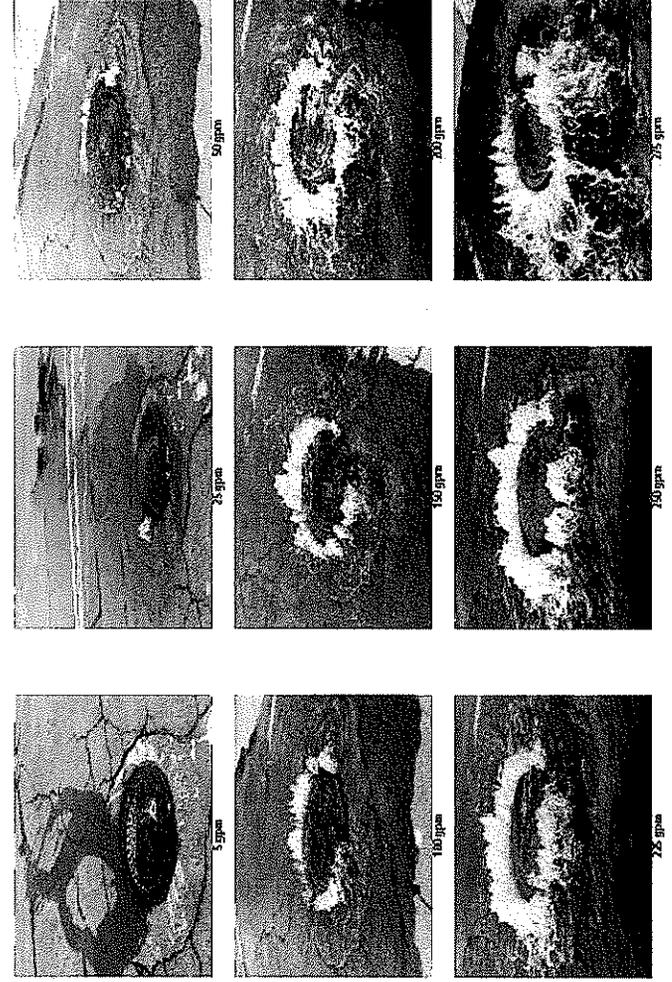


TABLE 1
ESTIMATED SSO FLOW OUT OF MH WITH COVER IN PLACE

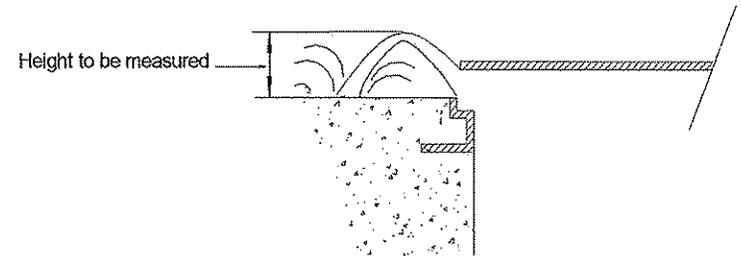
24" COVER				36" COVER			
Height of spout above M/H rim H in inches	SSO FLOW		Min. Sewer size in which these flows are possible	Height of spout above M/H rim H in inches	SSO FLOW		Min. Sewer size in which these flows are possible
	in gpm	in MGD			in gpm	in MGD	
1/4	1	0.001		1/4	1	0.002	
1/2	3	0.004		1/2	4	0.006	
3/4	6	0.008		3/4	8	0.012	
1	9	0.013		1	13	0.019	
1 1/4	12	0.018		1 1/4	18	0.026	
1 1/2	16	0.024		1 1/2	24	0.035	
1 3/4	21	0.030		1 3/4	31	0.044	
2	25	0.037		2	37	0.054	
2 1/4	31	0.045		2 1/4	45	0.065	
2 1/2	38	0.054		2 1/2	55	0.079	
2 3/4	45	0.065	2 3/4	66	0.085		
3	54	0.077	3	78	0.113		
3 1/4	64	0.092	3 1/4	93	0.134		
3 1/2	75	0.107	3 1/2	109	0.157		
3 3/4	87	0.125	3 3/4	127	0.183		
4	100	0.145	4	147	0.211		
4 1/4	115	0.168	4 1/4	169	0.243		
4 1/2	131	0.189	4 1/2	192	0.276		
4 3/4	148	0.214	4 3/4	217	0.312		
5	166	0.240	5	243	0.350		
5 1/4	185	0.266	5 1/4	270	0.389		
5 1/2	204	0.294	5 1/2	299	0.430		
5 3/4	224	0.322	5 3/4	327	0.471		
6	244	0.352	6	357	0.514		
6 1/4	265	0.382	6 1/4	387	0.558		
6 1/2	286	0.412	6 1/2	419	0.603		
6 3/4	308	0.444	6 3/4	451	0.649		
7	331	0.476	7	483	0.696		
7 1/4	354	0.509	7 1/4	517	0.744		
7 1/2	377	0.543	7 1/2	551	0.794		
7 3/4	401	0.578	7 3/4	587	0.845		
8	426	0.613	8	622	0.896		
8 1/4	451	0.649	8 1/4	659	0.949		
8 1/2	476	0.686	8 1/2	697	1.003		
8 3/4	502	0.723	8 3/4	734	1.057		
9	529	0.761	9	773	1.113		

The formula used to develop Table 1 measures the maximum height of the water coming out of the maintenance hole above the rim. The formula was taken from hydraulics and its application by A.H. Gibson (Constable & Co. Limited).

Example Overflow Estimation:

The maintenance hole cover is unseated and slightly elevated on a 24" casting. The maximum height of the discharge above the rim is 5 1/4 inches. According to Table 1, these conditions would yield an SSO of 185 gallons per minute.

FLOW OUT OF MH WITH COVER IN PLACE



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

Disclaimer:

This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

TABLE 2
ESTIMATED SSO FLOW OUT OF MH WITH COVER REMOVED

24" FRAME

Water Height above M/H frame H in inches	SSO FLOW		Min. Sewer size in which these flows are possible
	Q in gpm	in MGD	
1/8	28	0.04	
1/4	62	0.09	
3/8	111	0.16	
1/2	160	0.23	
5/8	215	0.31	6"
3/4	354	0.51	8"
7/8	569	0.82	10"
1	799	1.15	12"
1 1/8	1,035	1.49	
1 1/4	1,340	1.93	15"
1 3/8	1,660	2.39	
1 1/2	1,986	2.86	
1 5/8	2,396	3.45	18"
1 3/4	2,799	4.03	
1 7/8	3,132	4.51	
2	3,444	4.96	21"
2 1/8	3,750	5.4	
2 1/4	3,986	5.74	
2 3/8	4,215	6.07	
2 1/2	4,437	6.39	
2 5/8	4,569	6.58	24"
2 3/4	4,687	6.75	
2 7/8	4,799	6.91	
3	4,910	7.07	

36" FRAME

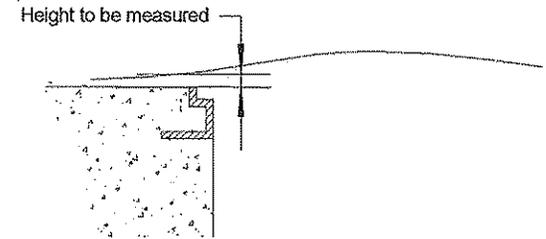
Water Height above M/H frame H in inches	SSO FLOW		Min. Sewer size in which these flows are possible
	Q in gpm	in MGD	
1/8	49	0.07	
1/4	111	0.16	
3/8	187	0.27	
1/2	271	0.39	
5/8	361	0.52	6"
3/4	458	0.66	8"
7/8	566	0.8	10"
1	660	0.95	12"
1 1/8	1,035	1.49	
1 1/4	1,486	2.14	15"
1 3/8	1,951	2.81	
1 1/2	2,424	3.49	18"
1 5/8	2,903	4.18	
1 3/4	3,382	4.87	
1 7/8	3,917	5.64	21"
2	4,458	6.42	
2 1/8	5,000	7.2	24"
2 1/4	5,556	8	
2 3/8	6,118	8.81	
2 1/2	6,764	9.74	
2 5/8	7,403	10.66	
2 3/4	7,972	11.48	30"
2 7/8	8,521	12.27	
3	9,062	13.05	
3 1/8	9,604	13.83	
3 1/4	10,139	14.6	
3 3/8	10,625	15.3	36"
3 1/2	11,097	15.98	
3 5/8	11,569	16.66	
3 3/4	12,035	17.33	
3 7/8	12,486	17.98	
4	12,861	18.52	
4 1/8	13,076	18.83	
4 1/4	13,285	19.13	
4 3/8	13,486	19.42	

Disclaimer:

This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

The maintenance hole cover is off and the flow coming out of a 36" frame maintenance hole at one-inch (1") height will be approximately 660 gallons per minute.

FLOW OUT OF MH WITH COVER REMOVED (TABLE 2)



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

Determining Flow Volume: Table 3
Flow out of a Manhole Pick Hole

Table 3

ESTIMATED SSO FLOW OUT OF MH PICK HOLE

Height of spout above M/H cover H in inches	SSO FLOW Q in gpm	Height of spout above M/H cover H in inches	SSO FLOW Q in gpm
1/8	1.0	3 1/8	6.2
1/4	1.4	3 1/4	6.3
3/8	1.7	3 3/8	6.3
1/2	1.9	5 1/2	6.4
5/8	2.2	5 5/8	6.5
3/4	2.4	5 3/4	6.6
7/8	2.6	5 7/8	6.6
1	2.7	6	6.7
1 1/8	2.9	6 1/8	6.8
1 1/4	3.1	6 1/4	6.8
1 3/8	3.2	6 3/8	6.9
1 1/2	3.4	6 1/2	7.0
1 5/8	3.5	6 5/8	7.0
1 3/4	3.6	6 3/4	7.1
1 7/8	3.7	6 7/8	7.2
2	3.9	7	7.2
2 1/8	4.0	7 1/8	7.3
2 1/4	4.1	7 1/4	7.4
2 3/8	4.2	7 3/8	7.4
2 1/2	4.3	7 1/2	7.5
2 5/8	4.4	7 5/8	7.6
2 3/4	4.5	7 3/4	7.6
2 7/8	4.6	7 7/8	7.7
3	4.7	8	7.7
3 1/8	4.8	8 1/8	7.8
3 1/4	4.9	8 1/4	7.9
3 3/8	5.0	8 3/8	7.9
3 1/2	5.1	8 1/2	8.0
3 5/8	5.2	8 5/8	8.0
3 3/4	5.3	8 3/4	8.1
3 7/8	5.4	8 7/8	8.1
4	5.5	9	8.2
4 1/8	5.6	9 1/8	8.3
4 1/4	5.6	9 1/4	8.3
4 3/8	5.7	9 3/8	8.4
4 1/2	5.8	9 1/2	8.4
4 5/8	5.9	9 5/8	8.5
4 3/4	6.0	9 3/4	8.5
4 7/8	6.0	9 7/8	8.6
5	6.1	10	8.7

Unrestrained
M/H cover will
start to lift

Note: This chart is based on a 7/8 inch diameter pick hole

Disclaimer: This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

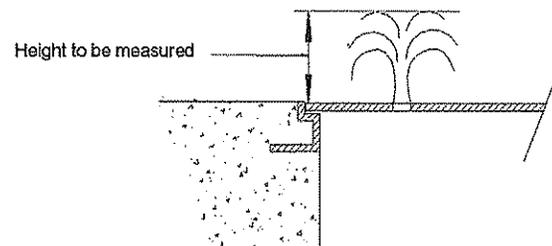
Determining Flow Volume: Table 3
Flow out of a Manhole Pick Hole
Formula and Drawing

The formula used to develop Table 3 is $Q=CcVA$, where Q is equal to the quantity of the flow in gallons per minute, Cc is equal to the coefficient of contraction (.63), V is equal to the velocity of the overflow, and A is equal to the area of the pick hole. If all units are in feet, the quantity will be calculated in cubic feet per second, which when multiplied by 448.8 will give the answer in gallons per minute. (One cubic foot per second is equal to 448.8 gallons per minute, hence this conversion method).

Example Overflow Estimation:

The maintenance hole cover is in place and the height of water coming out of the pick hole seven-eighths of an inch in diameter (7/8") is 3 inches (3"). This will produce an SSO flow of approximately 4.7 gallons per minute.

FLOW OUT OF VENT OR PICK HOLE (TABLE 3)



This sanitary sewer overflow drawing was developed by Debbie Myers, Principal Engineering Technician, for Ed Euyen, Civil Engineer, P.E. No. 33955, California, of County Sanitation District 1.

**EMERGENCY VENDOR
CONTACT INFORMATION**

FG-7

Service/Vendor	Call:	At:
Equipment Rental	A Tool Shed	408.263.7368
	United Rentals	408.269.4989 or 251.7730
Backhoe/Excavation	Preston Pipelines Inc.	408.262.1418
Pump Repair	Koffler Mechanical	510.567.0630
	Peninsula Pump Repair	650.588.5060
Environmental/HazMat	Safety Clean, Inc	800.468.1760
Pump Controls	Telestar, Inc	925.671.2888
Pump Controls	Thorton and Son	408.946.1015

**INTERNAL RESOURCES
CONTACT INFORMATION**

FG-8

Function	Contact	Telephone
All Resources	Greg Armanderiz	408.586.3317
Engineering	Kathleen Phalan	408.586.3345
Supply Procurement	Chris Shroeder	408.586.3161

Regulatory Notifications Packet

Instructions to First Responder:

Provide this packet to the person responsible for and authorized to make regulatory notifications.

Instructions for Person Making Regulatory Notifications:

1. Open this packet
2. Refer to RN-1: Guide to Reporting to Regulatory Authorities for instructions on performing required regulatory notifications.
3. **Document** all regulatory reporting using RN-3: SSO 2-Hour Notification Summary.

Contents:

Form	Page Number
Guide To Reporting To Regulatory Authorities.....	RN-1
Fax Reporting Form: to Local Health Agency.....	-2
SSO 2-Hour Notification Summary.....	-3

Supplemental

- SOP: SSO Regulatory Reporting
- SWRCB Monitoring Reporting Program
- Supplemental Correspondence: RWQCB
- SWRCB reporting notation

Regulatory Notifications Packet
Guide To Reporting To Regulatory Authorities**READ ME FIRST:**

ALWAYS document regulatory reporting using RN-3: SSO 2-Hour Notification Summary, regardless if the reporting is done during business hours or after hours.

Primary Reporting Summary**Refer to Side B for contact information, timeframes and reporting procedures**

If the backup or SSO:	Then contact:
<ul style="list-style-type: none"> • 1,000 gal, and/or • Results in a discharge into a drainage channel or a surface water, and/or • Discharged to a storm drain and was not fully recovered 	<ul style="list-style-type: none"> • California Office of Emergency Services • Santa Clara County Health Department • Fish and Wildlife
<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • Required posting of public warning signs 	<ul style="list-style-type: none"> • Santa Clara County Health Department
<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> •
<ul style="list-style-type: none"> • <u>All</u> SSOs & Backups from a <u>public</u> sewer 	<ul style="list-style-type: none"> • State Water Resources Control Board/CIWQS

Persons authorized to perform regulatory reporting:

- Public Works Manager
- Principal Utility Engineer
- Public Works Director/ City Engineer

Legally Responsible Official (LRO) authorized to electronically sign SWRCB online SSO reports:

- Public Works Manager: Glen Campi
Business hours: 408.586.2643/After hours: 408.690.3617
- Principal Utility Engineer: Steven Machida
Business hours: 408.586.3355/After hours: 408.658.4841
- Public Works Director/City Engineer: Jeff Moneda
Business hours: 408.586.3345/After hours: 408.908.0086

Additional External Notifications:

Report to:	Business hours	After hours	Trigger for reporting:
Bruce Carey, Claims Examiner, ABAG Plan Corporation	510.464.7946	209.988.5609	SSO's impacting private property that may be due to a failure in the City sewer or any SSO where the City believes a claim for damages may be submitted against the City.
If you do not receive a call back from Bruce Carey within 30 minutes, call:			
Angela Salsbury, Claims Manager ABAG Plan Corporation	510.464.7954	510.759.2896 510.282.2324	

Internal Reporting Requirements:

Report to:	Trigger for reporting:
Consider the need to report the incident to other appropriate City staff, such as Public Works Director, City Manager, City Attorney, etc.	Possible triggers would include such things as backups into multiple businesses, bodily injury, etc.
Emma Karlen, 408.586.3145	Backups/overflows from the public sewer that damage private property.

Regulatory Notifications Packet
Guide To Reporting To Regulatory Authorities

Regulatory Agency	Contact Information	Report if SSO meets any of the following conditions	Timeframe
California Office of Emergency Services (CalOES) ***Make certain to get a Control Number from CalOES	Telephone: 800.852.7550	<ul style="list-style-type: none"> Results in a discharge into a drainage channel or a surface water, and/or Discharged to a storm drain & not fully recovered (regardless of volume) 1,000 gallons or more 	Within 2 hours of becoming aware of the discharge Per RWQCB and SWRCB, CalOES will notify the RWQCB and suffice SWRCB Region notification requirements (see attached support documentation)
		<ul style="list-style-type: none"> Less than 1,000 gallons 	Not applicable
County Health Department Santa Clara County Health Department Notify County Health Department of the known details of the SSO using RN-2	Telephone: 408.918.3400 Fax: 408.258.5891	<ul style="list-style-type: none"> Results in a discharge into a drainage channel or that enter waters of the State 	Immediate reporting required (within 2 hours of becoming aware of the discharge)
		<ul style="list-style-type: none"> Required Posting of Public Warning Signs 	Immediate reporting required as soon as practical
State Water Resources Control Board 1. Go to the CIWQS Online SSO Reporting Database 2. Enter User Name & Password. 3. Enter requested information using information on the completed Sewer Overflow Report	<u>Website:</u> http://www.ciwqs.waterboards.ca.gov Notes: <ul style="list-style-type: none"> All electronic reports must be certified by the Legally Responsible Official (<i>see side A for list</i>) 	<ul style="list-style-type: none"> 1,000 gallons, and/or Discharged to a storm drain & not fully recovered (regardless of volume) , and/or Spills that enter waters of the State 	Immediate, but within 3 days reporting required If you leave any requested information blank, then you must return within 15 days and complete
		<ul style="list-style-type: none"> All SSOs & Backups from a public sewer 	Reporting required within 30 days after end of the month the SSO occurs in
		<ul style="list-style-type: none"> 	
CA Dept. of Fish & Wildlife	916.445.9326 Napa Office 916.358.1300 General Dispatch	<ul style="list-style-type: none"> Reached surface water 	Immediate reporting required as soon as practical
U.S Coast Guard Watch Office	510.437.3073	<ul style="list-style-type: none"> Spills that enter San Francisco Bay 	Immediate reporting required as soon as practical

Regulatory Notifications Packet

IMMEDIATE REPORTING BY FAX To Local Health Agency

TO:
Santa Clara County Health Department
Fax: 408.258.5891
Telephone: 408.918.3400
Re:

FROM:
City of Milpitas
Fax: 408.586.2610
Telephone: 408.586.2600
DATE:
of Pages:

URGENT FOR REVIEW PLEASE COMMENT PLEASE REPLY

NOTICE OF SANITARY SEWER OVERFLOW

In accordance with California Health and Safety Code Section 5410 et. seq.

Overflow Street Location/Comments -please indicate the spill cause, sources, and final spill destination entered:* (e.g., *drainage channel/surface water entered*) _____

City: * _____ ZIP Code: * _____ County: * _____

SSO Description if information is not available, please input 00:00 for time and 00 for gallons

Overflow Start Estimate: * Date:* ____/____/____ (mm/dd/yyyy)

Time:* ____:____(hh:mm)

Overflow End: Date:* Date:* ____/____/____ (mm/dd/yyyy)

Time:* ____:____(hh:mm)

Estimated Overflow Flow Rate: * _____ (gallons per minute)

Estimated Total Overflow Volume:* _____ (gallons)

Overflow Volume Recovered: * _____ (gallons)

Person Completed:* _____ Date: ____/____/____(mm/dd/yyyy)

Official Title: * _____ Phone Number :* _____

Email:* _____ Time spill was noticed: _____

Notifications:

Notified California Office of Emergency Services

SSO 2-HOUR NOTIFICATION SUMMARY**PART A – SSO NOTIFICATION/CERTIFICATION****SSO Description**

Location of SSO: _____

Drainage channel/surface water entered: _____

Suspected cause and source(s): _____

Estimated rate of flow, gal/min: _____

Estimated volume, gallons: _____

Status of response: _____

Total amount recovered: _____

SSO Notification**Name of person making 2-Hr Notification:** _____➤ **Date notification made:** _____➤ **CalOES - Phone Number:** 800.852.7550

Time called: _____ OES Control number: _____

➤ **Santa Clara County Health Department** Phone Number: 408.918.3400

Time called/faxed: _____

Spoke to _____ or Left voicemail message or Faxed notification**PART B ADDITIONAL NOTIFICATIONS**

1. AGENCY: _____

Time called: _____

Spoke to _____ or Left voicemail message

2. AGENCY: _____

Time called: _____

Spoke to _____ or Left voicemail message

Field Sampling Kit: Table of Contents

Form

Form Number

Procedures for Sampling Receiving Waters and Posting
Warnings after a Sewage Spill FS-1
Sample Collection Chain of Custody Record-2

The Field Sample Kit contains:

Item	Units
125ml Total Coliform Sampling Bottle preserved with Na ₂ S ₂ O ₃	3
Ammonia-Nitrogen Sample Bottle (1-liter plastic bottle preserved with H ₂ SO ₄)	3
Unpreserved 1-liter plastic bottle	3
Pair of Gloves – <i>check for holes</i>	2
Pair of Safety glasses	1
Sample Bottle Label	6
Chain of Custody Form	1
Instant Cold Pack	5
Standard Operating Procedure	1
Waterproof Pen (<i>Sharpie</i>)	1

Field Sampling Kit: Procedures For Sampling Receiving Waters and Posting Warnings After A Sewage Spill

COLLECT SAMPLES AS FOLLOWS:

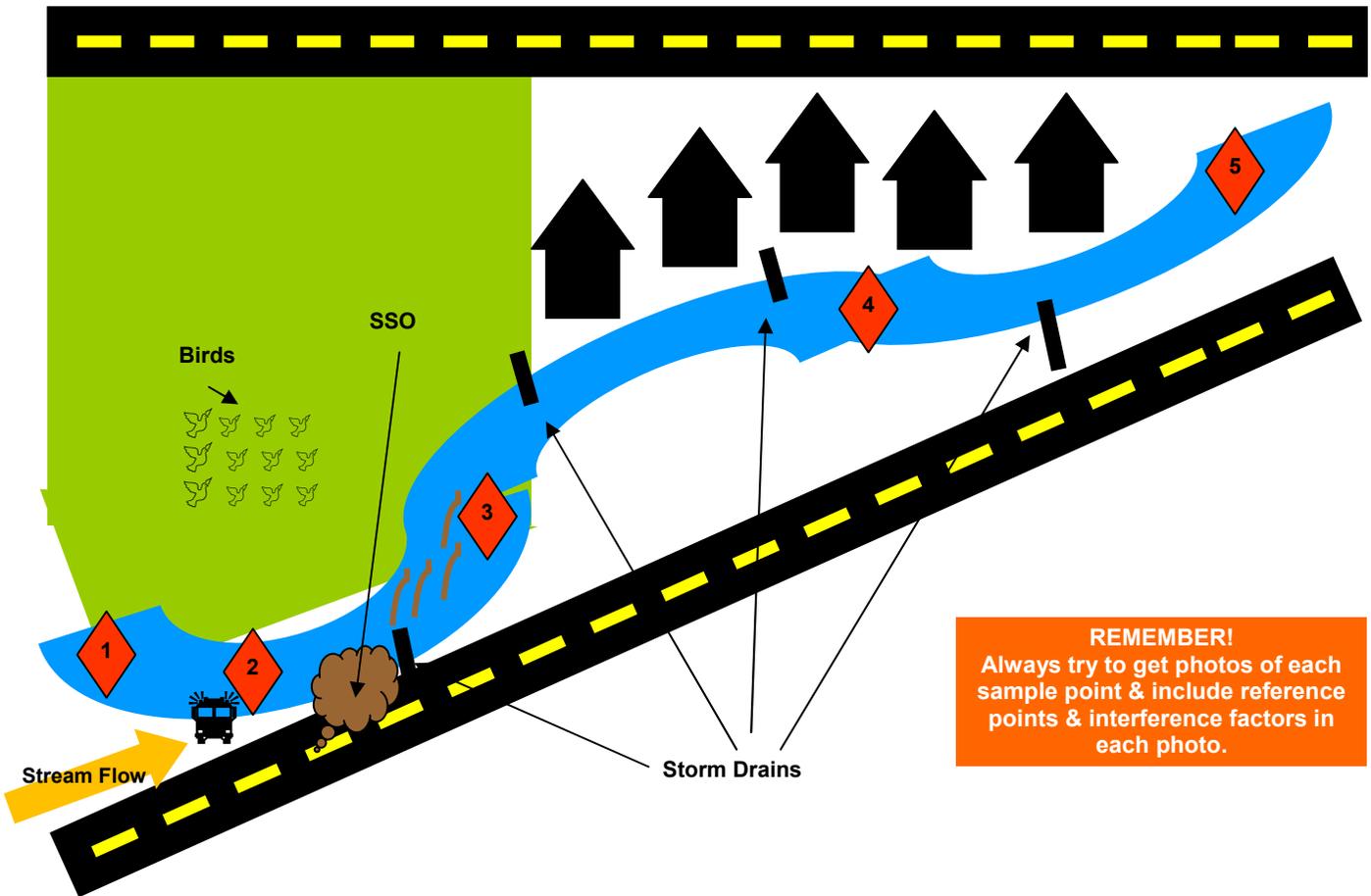
1. Get the Field Sampling Kit.
2. Chemical instant cold packs are in the kit. If needed, get ice pack from a convenience store and place in cooler.
3. Determine point spill entered waterway – photograph this location (*include a reference point in the photo*).
4. Put on the PPE from the Sampling Kit.

- COLLECT ALL SAMPLES AGAINST THE DIRECTION OF THE WATER FLOW! (FACE UPSTREAM)
- COLLECT UPSTREAM SAMPLE FIRST!
- COLLECT SAMPLES WELL AWAY FROM THE BANK (preferably where water is visibly flowing) AND 6" BELOW THE SURFACE
- AVOID SAMPLING DEBRIS OR SCUM LAYER FROM THE SURFACE.
- PHOTOGRAPH EVIDENCE OF DEAD FISH!

5. SAMPLING:

- a. Move 50' upstream of point where spill entered waterway (reference sample)
- b. Remove the seal from the coliform sample container (125ml) just prior to collecting your sample. A chemical has been added to the sample container. Leave the chemical in the bottle and do not rinse.
 1. Remove the cap immediately before collecting each sample
 2. Do not allow the inside of the cap to touch anything
 3. Holding the bottle in one hand, face upstream and lower the bottle 6" below the water surface. Then sweep the bottle upstream and out of the water. Be careful not to disturb the bottom sediment. If bottle is over-filled, do not pour water out. Instead, cap and shake contents well, then quickly pour contents into another labeled sterile sample bottle up to the fill line. Immediately replace the cap of the new sample bottle.
- c. Open the larger containers and follow collection process above (steps 5a-c) to fill to just below the neck of the container. A sampling pole may be used to collect the sample and then transferred to the container.
NOTE: The ammonia-nitrogen sample bottle contains sulfuric acid – LEAVE THE ACID IN THE BOTTLE AND DO NOT ALLOW IT TO TOUCH YOUR SKIN!
- d. Label all of the samples with their location and note the date and time collected
- e. Place samples in cooler on the ice pack
- f. Take a photo of this sample location (*include a reference point in the photo*)
- g. Move at least 10' downstream of point where spill entered waterway and repeat steps 5a-f
7. Complete the Chain of Custody form from the Sampling Kit
8. Immediately contact: San Jose/Santa Clara Water Pollution Control Plant (WPCP):
700 Los Esteros Road, San Jose, CA 95134-1001
408.945.5300 (Business Hours: 7:30am – 4:30pm M-F, but plant is staffed 24/7) and inform them samples require processing.
9. Take cooler containing the samples and completed chain of custody to WPCP. Samples should be taken to lab within 4 hours of collection time.
10. Post warning signs as directed by the County Environmental Health Department or the Senior Utility Maintenance Supervisor
11. Repeat sampling daily from time the spill is known until the results of two consecutive sets of samples indicate the return to the normal level or cessation of monitoring is authorized by the County Environmental Health Department or designee
12. Remove Warning Signs and lift restrictions when authorized by the County Environmental Health Department or designee

Field Sampling Kit: Procedures For Sampling Receiving Waters and Posting Warnings After A Sewage Spill



- 1** Sample Location 1: Baseline Sample, no observable interference from birds, animals, runoff, etc
- 2** Sample Location 2: Baseline Sample, observable interference from birds, animals, runoff, etc
NOTE: Only collect this sample if you observe any possible interfering factors upstream from the spill location
- 3** Sample Location 3: Immediately downstream of SSO entry point
- 4** Sample Location 4: Further downstream of SSO entry point – note any possible interfering factors
- 5** Sample Location 5: Further downstream of SSO entry point – note any possible interfering factors

NOTE: This example is provided for illustrative purposes only! Base each sampling event on the geography, drainage and interference factors (*i.e. birds, animals, runoff, etc*) of the area impacted.

Field Sampling Kit: Sample Collection Chain of Custody Record

INSTRUCTIONS TO EMPLOYEE: Complete all shaded boxes.

Customer Name	City of Milpitas			PO#	
Customer Address	455 E. Calaveras Blvd. , Milpitas, CA 95035			WO#	
Customer Telephone	408.586.2600	Mail Code		LAB INFORMATION	
Sample Location Name				Ship to:	<input type="checkbox"/> Normal (21 days)
Lab Program Coordinator		Phone #		Ship Date:	<input type="checkbox"/> Rush: _____
Sampled By				Courier:	<input type="checkbox"/> Other:

LIMS# (Issued by Lab)	SAMPLE COLLECTION INFORMATION						Analysis Requested										QA/QC Requirements	
	Date	Time	Type		Sample Location	Bottle Type and Quantity	Matrix*	Nitrites as N	Coliform (fecal/total)	pH	BOD	P-total	NH3-D	TKN	EC	TDS	<input checked="" type="checkbox"/> Lab Standard	<input type="checkbox"/> Special (see attached)
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Upstream	1L poly - unpreserved	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			Remarks/Notes
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Upstream	1L poly	A				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Upstream	125ml pl	A		<input checked="" type="checkbox"/>									
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Downstream	1L poly - unpreserved	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Downstream	1L poly	A				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Downstream	125ml pl	A		<input checked="" type="checkbox"/>									
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Source	1L poly - unpreserved	A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Source	1L poly	A				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
			<input type="checkbox"/> Composite	<input checked="" type="checkbox"/> Grab	Source	125ml pl	A		<input checked="" type="checkbox"/>									

Relinquished by	Date	Time

Relinquished to	Date	Time

Transport/Shipping Information		
<input type="checkbox"/> USPS	<input type="checkbox"/> UPS	<input type="checkbox"/> FedEx
Tracing #:		
<input type="checkbox"/> Other:		

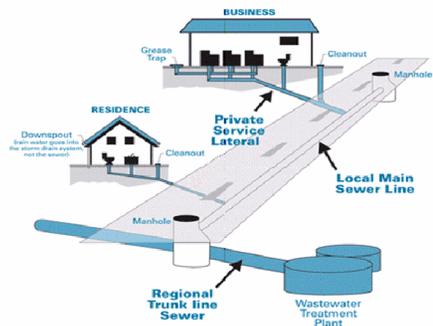
Sample Receiving Documentation

Container intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	Correct container? <input type="checkbox"/> Yes <input type="checkbox"/> No	Field preserved? <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody tape intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Cooled? <input type="checkbox"/> Yes <input type="checkbox"/> No	Temp. Blank? <input type="checkbox"/> Yes <input type="checkbox"/> No (°C)	Comments:	
Sample distribution: <input type="checkbox"/> Lab bench <input type="checkbox"/> Ice chest <input type="checkbox"/> Walk-in cooler shelf #		Disposal Date:	Disposed by: (inits.)
C-O-C Distribution	Date: By:	<input type="checkbox"/> Lab Admin File <input type="checkbox"/> Prog/proj Mgr. <input type="checkbox"/> Lab Prog. Coord.	<input type="checkbox"/> Delivery courier <input type="checkbox"/> Pick-up courier

How a Sewer System Works

A property owner's sewer pipes are called **service laterals** and are connected to larger local main and regional trunk lines.

Service laterals run from the connection at the home to the connection with the public sewer. These laterals are the responsibility of the property owner and must be maintained by the property owner.

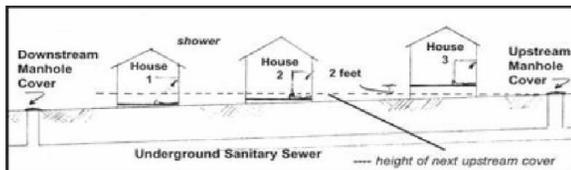


Is My Home Required to Have a Backflow Prevention Device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: "Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve."

The intent of Section 710.1 is to protect the building interior from mainline sewer overflows or surcharges.

Additionally, U.P.C. 710.6 states: "Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."



If you have a sewage spill from your private sewer line that impacts storm drains, waterways or public property, contact:

City of Milpitas

408.586.2600 (business hours)

408.586.2400 (after 5:00pm M-F and on weekends)

Santa Clara County Environmental Health Department

408.918.3400

California Health and Safety Code, Sections 5410-5416 requires:

- No person shall discharge raw or treated sewage or other waste in a manner that results in contamination, pollution, or a nuisance.
- Any person who causes or permits a sewage discharge to any state waters:
 - Must immediately notify the local health agency of the discharge.
 - Shall reimburse the local health agency for services that protect the public's health and safety.
 - Who fails to provide the required notice to the local health agency is guilty of a misdemeanor and shall be punished by a fine (between \$500-\$1,000) and/or imprisonment for less than one year.

San Francisco Regional Water Quality Control Board

510.622.2300

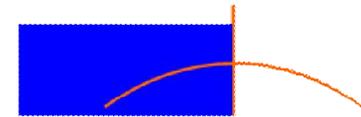
Requires the prevention, mitigation, response to, and reporting of sewage spills.

California Emergency Management Agency

800.852.7550

California Water Code, Article 4, Chapter 4, Sections 13268-13271 & California Code of Regulations, Title 23, Division 3, Chapter 9.2, Article 2, Sections 2250-2260 require:

- Any person who causes or permits sewage in excess of 1,000 gallons to be discharged to state waters shall immediately notify the California Emergency Management Agency.
- Any person who fails to provide the notice required by this section is guilty of a misdemeanor and shall be punished by a fine (less than \$20,000) and/or imprisonment for not more than one year.



Sewer Spill Reference Guide



Your Responsibilities as a Private Property Owner

Provided to you by:

City of Milpitas

455 E. Calaveras Blvd.

Milpitas, CA 95035

408.586.2600

Copyright © 2004-2012
DKF Solutions Group, LLC.
All Rights Reserved Rev. 5/19/11

Why do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes overflows through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches.

CAUTION!

When trying to locate a sewer problem, never open manholes or other public sewer structures. Only our crews are allowed to open & inspect these structures.

Common causes of sewage spills:

- Grease build-up
- Tree roots
- Broken/cracked pipes
- Missing or broken cleanout caps
- Undersized sewers
- Groundwater/rainwater entering the sewer system through pipe defects and illegal connections

Prevent most sewage backups with a Backflow Prevention Device

This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Protect the environment!

If you let sewage from your property discharge to a gutter or storm drain, you may be subject to penalties and/or out-of-pocket costs for clean-up and enforcement efforts. A property owner may be charged for costs incurred by agencies responding to spills from private properties.

What to look for:

Sewage spills can be a very noticeable gushing of water from a manhole or a slow water leak that may take time to be noticed. Don't dismiss unaccounted-for wet areas. Look for:

- Drain backups inside the building.
- Wet ground and/or water leaking around manhole lids onto your street.
- Leaking water from cleanouts or outside drains
- Unusual odorous wet areas: sidewalks, external walls, ground/landscape around a building.

The following are indicators of a possible obstruction in your sewer line:

- Water comes up in floor drains, showers or toilets.
- Toilets, showers or floor drains below ground level drain very slowly.

What to do if there is a spill:

Immediately notify the City of Milpitas. Our crews locate the blockage and determine if it is in the public sewer; if it is the crew removes the blockage and arranges for cleanup.

If the backup is in your private internal plumbing or in the private service laterals, you are required to immediately:

- Control and minimize the spill by shutting off or not using the water
- Keep sewage out of the storm drain system using sandbags, dirt and/or plastic sheeting
- Call a plumbing professional to clear blockages and make repairs as needed. Look in the yellow pages under "Plumbing Drain & Sewer Cleaning" or "Sewer Contractors."
- Always notify your sewer/public works department or public sewer district of sewage spills.

Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas. You can locate local firms by looking in the Yellow Pages under "Water Damage" or "Fire Damage." If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Other Tips:

- Keep children and pets out of the affected area until cleanup has been completed.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup of the affected area.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, baby toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.

- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured or ill.

Spill cleanup outside the home:

- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solutions, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.
- Seek immediate attention if you become injured/ill.

In the event of a **Sewer Backup** into a home/business **READ THIS FIRST**

- ❑ For backups into a business: Contact the Public Works Manager, Principal Utility Engineer or the Public Works Director
- ❑ For any media requests: Contact the Public Works Director (408) 586-3345

Employee Completing This Packet: _____ Date/Time Arrived: _____

Property Address: _____

Utility Maintenance Crew

- 1: Open this envelope.
- 2: Follow the steps on the “Responding to a Sanitary Sewer Backup” card (*BP-1 - inside this envelope*).
- 3: If customer is home, give them the Customer Service Packet and have them initial this envelope below:
Customer acknowledgement of receipt of Customer Service Packet: _____
- 4: Put everything back in this Sewer Backup Envelope:
 - First Responder Form
 - Sanitary Sewer Overflow Report
 - Camera (if used)
- 5: Complete the Service Request Form (*if this is during business hours*) or the Standby Service Request Form (*if this is after hours*) give to the Public Works Director, Principal Utility Engineer or the Public Works Director.



Public Works Manager, Principal Utility Engineer or Public Works Director

- 1: Open this envelope and review forms for accuracy and completeness.
- 2: Open the Regulatory Notifications Packet (*inside this envelope*) and make the required notifications.
- 3: Send camera out for processing (*if applicable*) or include digital images on cd in this Packet.
4. Copy all items in this Packet and archive in accordance with City policy.
5. Complete the Claims Submittal Checklist (*inside this envelope*).
6. Forward this Packet, with originals and photos, to the Finance Director/Risk Manager or designee.
7. Complete the Collection System Failure Analysis Form.
8. Debrief spill response with affected personnel, as appropriate, and make any necessary procedural changes.



Finance Director/Risk Manager or Designee

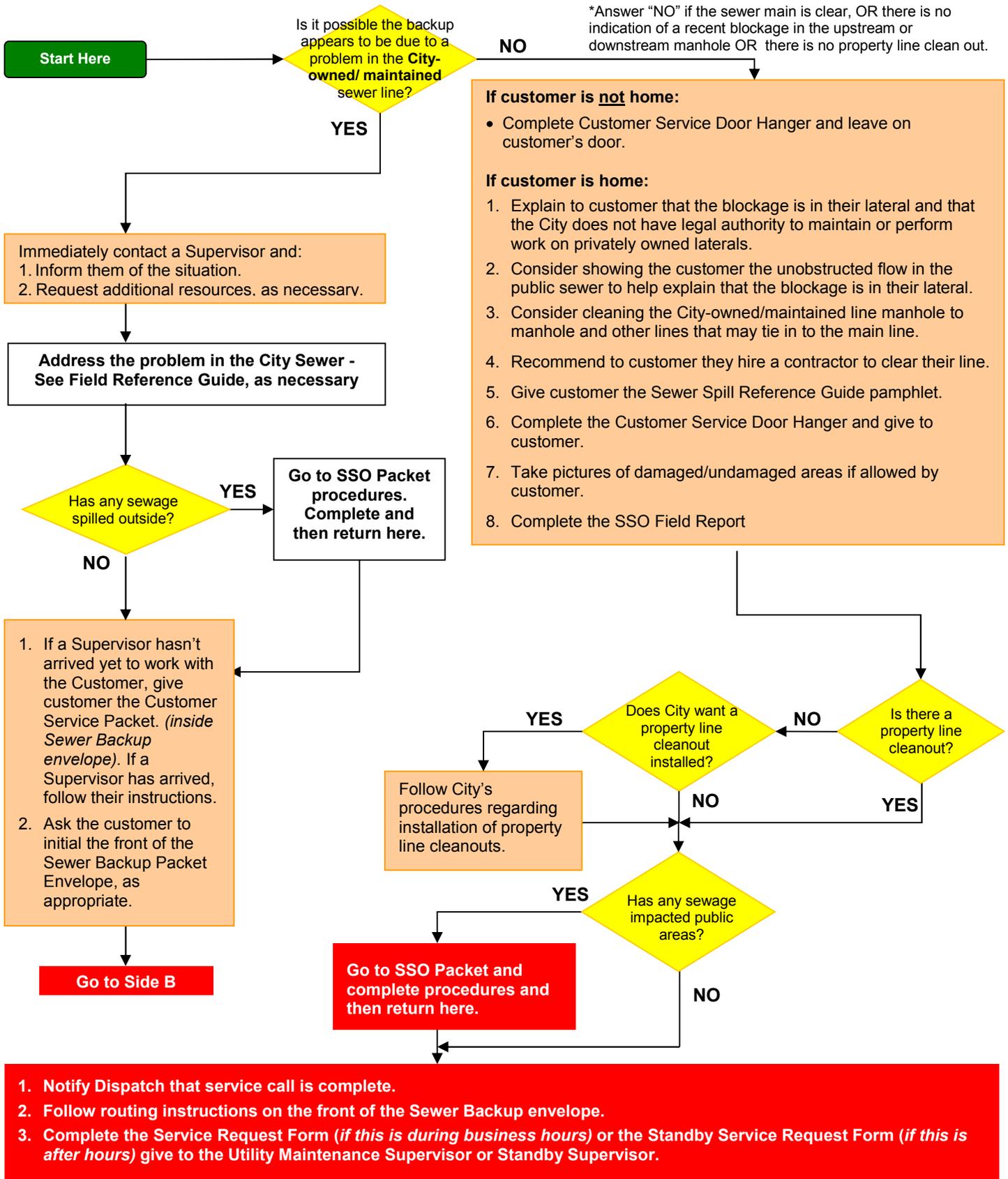
- 1: Open this envelope and review forms for accuracy and completeness.
- 2: Complete the Claims Submittal Checklist (*inside this envelope*).
- 3: Refer to Claims Handling Procedure Summary in the SSO/Backup Response Plan for further instructions.

City of Milpitas, CA
Sanitary Sewer Overflow and Backup Response Plan

<u>Form</u>	<u>Form Number</u>
Response Instructions.....	envelope label
Response Flowchart.....	BP-1
First Responder Form	-2
Claims Submittal Checklist.....	-3
Sewer Lateral CCTV Report.....	-4
Sewer Overflow Report	-5
Collection System Failure Analysis Form	-6
Customer Service Packet	
Instructions	-envelope
Customer Information	CS-1
Claim Form.....	-2
Sewer Spill Reference Guide.....	pamphlet
Sewer Maintenance Door Hangar	n/a
Sewer Spill Reference Guide	pamphlet

For pre-assembled packets contact DKF Solutions Group at 707.373.9709 or losscontrol@sbcglobal.net

Responding to a Sanitary Sewer Backup



*Answer "NO" if the sewer main is clear, OR there is no indication of a recent blockage in the upstream or downstream manhole OR there is no property line clean out.

Responding to a Sanitary Sewer Backup

START HERE FROM SIDE A

EMPLOYEE: Normally, a Supervisor will arrive to complete the following steps. However, in the event they are unavailable or if they direct you, perform the following:

1. Remove the First Responder Form (*BP-2*) from the Sewer Backup Packet envelope and complete.
2. Take photographs of affected and non-affected areas, if *allowed* by customer. Try to get pictures showing where the damaged areas stopped.
3. Immediately contact Bruce Carey, Claims Examiner at 510.464.7946 work or 209.988.5609 cell (Note: If you do not receive a call back from Bruce within 30 minutes, call Angela Salsbury, Claims Manager at 510.464.7954 work or 510.750.2896 or 510.282.2324 cell) and provide the information from the completed First Responder Form.

1. Complete the Sanitary Sewer Overflow Report (*Inside the Sewer Backup Packet*). **Note:** Estimate SSO volume using one of the methods listed in the Field Guide. Remember – the spill was *probably* occurring for a period of time before it was reported – take that into account when estimating SSO volume. Be sure to document all assumptions made when estimating volume.
2. Call your Supervisor and provide information from the Sanitary Sewer Overflow Report, including the estimated size of the spill.

Clean/disinfect any overflow **outside** of the building using the de-chlorinating diffuser. **Note:** DO NOT allow any disinfectants to escape to storm drains.

Can you locate a backwater prevention device (BPD) or cleanout on the affected building?

YES

Photograph the backwater prevention device or cleanout

NO

1. Complete a City work order to have lateral televised as soon as possible
2. Complete Lateral TV Report (inside the Sewer Backup Packet envelope)

Is there any reason to have the lateral televised?

YES

NO

1. Complete the remaining instructions on the front of the Sewer Backup Packet.
2. Notify Dispatch that the Service Call has been completed.
3. Follow routing instructions as indicated on the front of the Sewer Backup Packet.
4. Complete the Service Request Form (*if this is during business hours*) or the Standby Service Request Form (*if this is after hours*).

MEDIA AND PUBLIC RELATIONS GUIDELINES:

Exercise caution in contacts with the public or media when you respond to a spill. Any information you provide or statements you make may become pertinent in the event of possible court action, it is important to:

- Avoid giving out the wrong information,
- Avoid speculating about the situation you are responding to,
- Avoid making accusations against customers, businesses or other public agencies, and
- Avoid providing incorrect facts about a company or other agency.

Be courteous and provide accurate information to questions within the limits above. In some cases, it may be appropriate to say that we do not have any information, or delay answering a question and say when an answer may be available.

Fill out this form as completely as possible.
Ask customer if you may enter the home. If so, take photos of affected and adjacent areas not affected.

TIME STAFF ARRIVED ON-SITE:

DID CUSTOMER CALL A CLEANING CONTRACTOR? Yes No

TIME CALLED:

IF YES, NAME OF CONTRACTOR:

TELEPHONE:

VRSD REQUESTED CLEANING CONTRACTOR? Yes No

TIME CALLED:

TIME ARRIVED:

SECTION A

DATE:

TIME:

EMPLOYEE NAME:

RESIDENT:

PROPERTY MANAGERS:

STREET ADDRESS:

STREET ADDRESS:

CITY, STATE AND ZIP:

CITY, STATE AND ZIP:

PHONE:

PHONE:

IS NEAREST UPSTREAM MANHOLE VISIBLY HIGHER THAN THE DRAIN THAT OVERFLOWED? Yes No

OF PEOPLE LIVING AT RESIDENCE:

Approximate Age of Home:

of Bathrooms:

of Rooms Affected:

Approximate Amount of Spill (gallons):

Approximate Time Sewage Has Been Sitting (hrs/days):

How Was Spill Volume Calculated?

Numbers of Pictures Taken

Digital or Film?

Does property have property line cleanout?

 YES NO Unknown

Does the Customer have a Backwater Prevention Device (BPD)?

 YES NO Unknown

If yes, was the BPD operational at the time of the overflow?

 YES NO UnknownHave there ever been any previous spills at this location? YES NO UNKNOWNHas the Resident had any plumbing work done recently? Yes No*If YES, please describe:***GO TO SIDE 2**

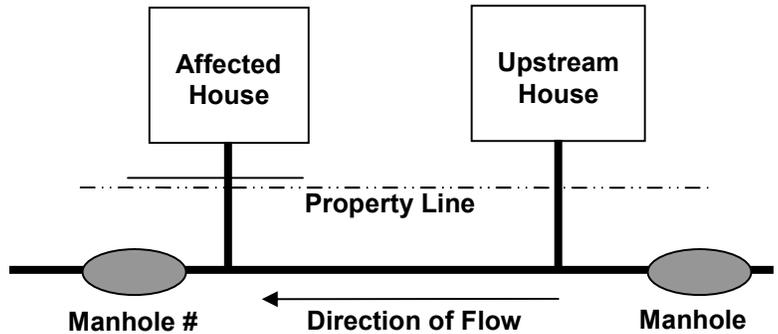
SECTION B: SANITARY SEWER LINE BLOCKAGE LOCATION

PLEASE CHECK THE BOX THAT DESCRIBES YOUR OBSERVATIONS

Customer Cleanout Was:	Structure was:		
	Non - Existent	Full	Empty
Non-Existent			
Full			
Empty			

Recommended Follow-Up Action(s):

Place an X where the blockage occurred
Circle the areas where sewage overflowed/backed



Did sewage go under buildings? Yes No Unsure

SECTION C: ADDITIONAL NOTES

Place completed form in Sewer Backup Envelope and follow routing instructions.

Public Works Manager or Other Reporting Authority

1. Complete the following information:

Title: _____
Name: _____
Phone: _____
Today's Date: _____

2. Copy the items listed below and retain for internal archiving purposes.

3. Place the originals back in the Backup Response Envelope and forward to the Public Works Director or Designee:

- Form BP-2: First Responder Form (*copy*)
- Form BP-3: Claims Submittal Checklist (*this form*)
- Form BP-4: Lateral CCTV Report (*if applicable*)
- Form BP-5: Sanitary Sewer Overflow Report (*copy*)
- All photos taken (*hardcopy or electronic*)
- Any other information you feel is important in this claim

4. Ensure all appropriate notifications (*i.e. State Water Resources Board*) have been completed.**Finance Director/Risk Manager or Designee**

1. Verify claims packet is complete.

2. Notify ABAG Plan:

ABAG Plan Corporation
Attn: Bruce Carey, Claims Examiner
P.O. Box 2050
Oakland, CA 94604-2050
Telephone: (510) 464-7946
Fax: (510) 464-7989

INSTRUCTIONS: Complete all items EXCEPT those that are shaded graySpill Category (*check one*): Category 1 Category 2 Category 3**A. SPILL LOCATION**

Spill Location/Address:

Latitude Coordinates: Longitude Coordinates:

Street Name and Number:

Nearest Cross Street City: Zip Code:

County: Santa Clara

B. SPILL DESCRIPTIONSpill Appearance Point: Building/Structure Force Main Gravity Sewer Other Sewer System Structure (*i.e. cleanout*)
 Pump Station Manhole- Structure ID#: Other (*specify*):Did the spill reach a drainage channel and/or surface water? Yes (*Category 1*) NoIf the spill reached a storm sewer, was it fully captured and returned to the Sanitary Sewer? Yes NoWas this spill from a private lateral? Yes No If YES, name of responsible party:Final Spill Destination: Beach Building structure Other paved surface Storm drain Street/curb& gutter
 Surface water Unpaved surface Other (*specify*):Estimated spill volume (*in gallons*): Method calculated:Est. volume of SSO recovered (gal): Were photos taken? No Yes – how many?

Estimated volume of spill reaching surface water, drainage channel, or not recovered from a storm drain (gal):

C. SPILL OCCURRING TIME

Estimated spill start date and time:

Date and time spill reported to sewer crew: Date and time sewer crew arrived:

Estimated spill end date and time:

D. CAUSE OF SPILLLocation of Blockage: Main Lateral Private Lateral OtherSSO cause (*check all that apply*): Debris/Blockage Flow exceeded capacity Grease Operator error Roots
 Pipe problem/failure Pump station failure Rainfall exceeded design Vandalism Inflow/infiltration
 Animal carcass Electrical power failure Bypass Debris from laterals Construction Debris
 Other (*specify*):Weather conditions prior 72 hours: Sunny Weather Cloudy Weather Measurable Rain Rain for Several DaysIf SSO is caused by wet weather, choose size of storm: 1-yr 2-yr 5-yr 10-yr 50-yr 100-yr >100-yr Unknown

Diameter (in inches) of pipe at point of blockage/spill cause (if applicable):

Sewer pipe material at point of blockage/spill cause (if applicable):

Description of terrain surrounding point of blockage/spill cause: Flat Mixed Steep**E. SPILL RESPONSE**Spill response activities (check all that apply): Cleaned up Contained all/portion of spill TV inspection Restored flow
 Returned all/portion of spill to sanitary sewer Other (*specify*):

Spill response completed (date & time): Name of impacted waters (if applicable):

Visual inspection result of impacted waters (if applicable):

Any fish killed? Yes No *if Yes, try to estimate number of fish killed:* Any ongoing investigation? Yes NoName of impacted beach (if applicable): Were health warnings posted? Yes No

Health warning/beach closure posting/details:

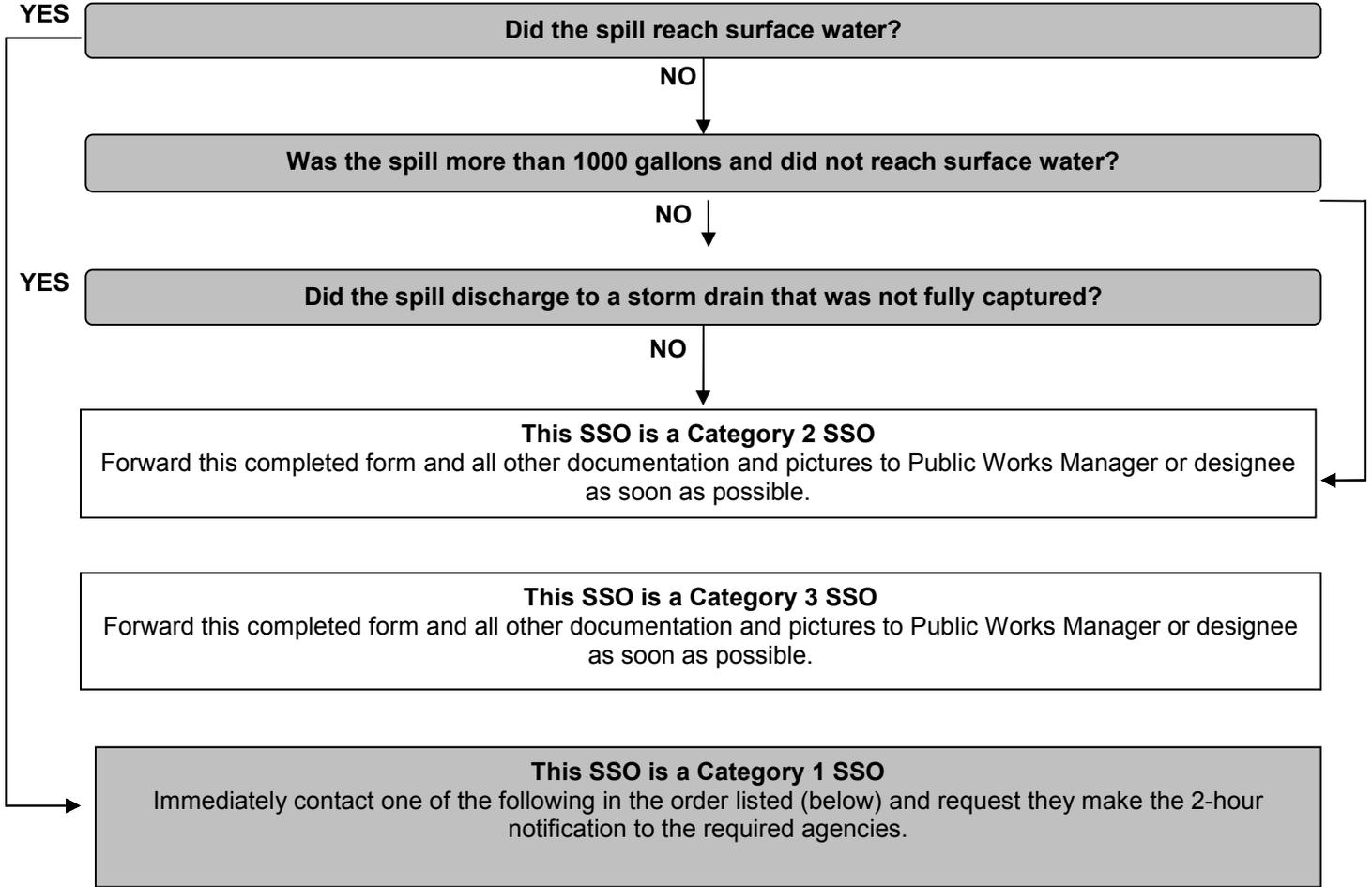
Were samples of impacted waters collected? Yes No If YES, select the analyses: DO Ammonia Bacti OtherRecommended corrective actions: Add sewer to PM Program Adjust PM schedule Adjust PM method Rehab sewer Replace sewer Enforcement action against FOG source Other (*specify*):**F. NOTIFICATION DETAILS**

CalOES contacted date and time (if applicable):

CalOES Control Number (if applicable): Spoke to:

GO TO SIDE B

REGULATORY NOTIFICATIONS START HERE



PERSON	CELL PHONE	BUSINESS HOURS	AFTER HOURS
Glen Campi		408.586.2643	408.690.3617
Steven Machida		408.586.3355	408.658.4841
Jeff Moneda		408.586.3345	408.908.0086

Incident Report #		Prepared By	
SSO/Backup Information			
Event Date/Time		Address	
Volume Spilled		Volume Recovered	
Cause			
Summary of Historical SSOs/Backups/Service Calls/Other Problems			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By		Record Review Date	
Summary of CCTV Information			
CCTV Inspection Date		Tape Name/Number	
CCTV Tape Reviewed By		CCTV Review Date	
Observations			
Recommendations			
<input type="checkbox"/>	No Changes or Repairs Required		
<input type="checkbox"/>	Maintenance Equipment		
<input type="checkbox"/>	Maintenance Frequency		
<input type="checkbox"/>	Repair (Location and Type)		
<input type="checkbox"/>	Add to Capital Improvement Rehabilitation/Replacement List: Yes <input type="checkbox"/> No <input type="checkbox"/>		
Supervisor Review Date		Superintendent Review Date	

Customer Service Packet

Contents:

<u>Form</u>	<u>Form Number</u>
Customer Information Letter.....	CS-1
Claim Form	-2
Sewer Spill Reference Guide	pamphlet

Instructions:

1. Review the Customer Information Letter to determine actions that need to be taken immediately including:
 - a. Turn off the HVAC system if necessary.
 - b. Block floor vents to prevent sewage from entering if necessary.
 - c. Turn off any appliances using water.
2. Complete the City Claim Form to file a claim. See the Customer Information Letter for information about returning the form.
3. Review the Sewer Spill Reference Guide pamphlet.

This packet provided by:

Name: _____
Title: _____
Telephone: _____

If you have any questions contact:

Finance Director/Risk Manager at 408.586.3145

Print on 6" x 9" envelope

Dear Resident:

We recognize that sewer back flow incidents can be stressful. The City of Milpitas (*City*) has prepared this brief set of instructions to help you minimize the impact of the loss by responding promptly to the situation.

The City is not responsible for clean up charges or damages caused by blockages in the property owner's sewer line or caused by code violations. At this time, the City is investigating the cause of the loss and does not assume liability for damages. However, if our investigation determines the City is responsible for this incident, the costs you incur for reasonable and necessary clean up will be included in the settlement of your claim. Regardless of whether you or the City is responsible for the loss, it is up to you to arrange for the repair of your property and to present a claim for consideration.

You or the property owner should immediately contact a firm for clean-up of the affected areas. If you do not know of a company to call for service, the following 24-hour emergency restoration companies are available to respond: *

Restoration Management (South Bay)	800.400.5058	Restoration Management (Milpitas)	707.750.6320
Restoration Management (Los Altos Hills)	708.750.6320	ServPro (Milpitas)	707.226.2181
Service Master (Redwood Town)	650.299.9080	Ideal Drying (South San Francisco)	800.379.6881
Service Master (South San Francisco)	415.584.6100	Britannia Cal Pacific (So.San Francisco)	650.742.6490
Service Master (Hayward-Los Altos Hills)	510.300.2990 or	Montgomery Sansom Ltd (Millbrae)	650.777.9010
	800.480.8439	Four Star Cleaning & Restoration (Fremont)	510.796.5900
			800.255.3333

*This list is provided as a resource only. The City does not require or endorse the use of any of these firms. This list is not to be construed as exclusive, comprehensive or limiting in any way. Qualified contractors can be found in the Yellow Pages under "Water Damage Restoration" or "Fire & Water Damage Restoration". However, be sure you hire a firm with experience in sewer backups and enough resources to get the job done quickly.

What you need to do now:

- Contact a restoration company for clean up and removal of affected surfaces.
- Do not attempt to clean the area yourself, let the company you hire handle this.
- Keep people and pets away from the affected area(s).
- Turn off heating/air conditioning systems.
- Turn off any appliances that use water.
- Prevent any material from reaching floor vents to prevent contamination.
- Do not remove items from the area –the company you hire will handle these contents.
- If you had recent plumbing work, contact your plumber or contractor.
- Contact your homeowner's insurance carrier to report a claim.
- File your claim with Finance Director / Risk Manager at 455 E. Calaveras Blvd. Milpitas, Ca 95035, 408.586.3145, as soon as practical. The California Government Code, Sections 900 -960, requires filing a written claim and outlines specific time lines and notice procedures that must be used.
- Call the City's Claims Administrator and provide a number where you can be reached: Association of Bay Area Governments (ABAG), Bruce Carey, Claims Examiner at 510.464.7946.

CITY OF MILPITAS
Office of the City Clerk
455 E. Calaveras Blvd.
Milpitas CA 95035
PH: (408) 586-3001

THE NAME AND ADDRESS OF THE CLAIMANT:

B. THE ADDRESS TO WHICH THE PERSON PRESENTING THE CLAIM DESIRES NOTICES TO BE SENT:

DAYTIME TELEPHONE:
EVENING TELEPHONE:

THE DATE, PLACE AND OTHER CIRCUMSTANCES OF THE OCCURRENCE OR TRANSACTION WHICH GAVE RISE TO THE CLAIM ASSERTED:

DATE OF OCCURRENCE:
TIME OF OCCURRENCE:
PLACE OF OCCURRENCE:
CIRCUMSTANCES:

A GENERAL DESCRIPTION OF THE INDEBTEDNESS, OBLIGATION, INJURY, DAMAGE OR LOSS INCURRED SO FAR AS IT MAY BE KNOWN AT THE TIME OF PRESENTATION OF THE CLAIM:

THE NAME OR NAMES OF THE PUBLIC EMPLOYEE OR EMPLOYEES CAUSING THE INJURY, DAMAGE, OR LOSS, IF KNOWN:

AMOUNT OF CLAIM: \$
(if less than \$10,000.00)

JURISDICTION OF CLAIM:
 MUNICIPAL COURT (CLAIMS UP TO \$25,000)
 SUPERIOR COURT (CLAIMS OVER \$25,000)

BASIS OF COMPUTATION:

DECLARATION

I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.

SIGNATURE OF CLAIMANT OR REPRESENTATIVE:

DATE:

READ THIS FIRST

In the event of a **Sanitary Sewer Overflow**

Check here if a FOG investigation is necessary

Employee Completing This Packet: _____ Date/Time Arrived: _____

Property Address: _____

Utility Maintenance Crew

- 1st: Open this envelope.
- 2nd: Follow the steps on the "Responding to a Sanitary Sewer Overflow" (OP-1).
- 3rd: Reference the Field Guide as necessary.
- 4th: Put everything back in this Sewer Overflow Envelope:
 - Camera (if used)
 - Sanitary Sewer Overflow Report
 - Any additional notes/documentation
- 5th: Complete the Service Request Form (*if this is during business hours*) or the Standby Service Request Form (*if this is after hours*), give to the Utility Engineering Administrative Analyst.



Admin Analyst, Principal Utility Engineer or Public Works Director

- 1st: Open this envelope. Review forms/documentation.
- 2nd: Open the Regulatory Notifications Packet (*inside this envelope*) and make the required notifications.
- 3rd: Send camera out for processing (*if applicable*) or copy digital images to cd and place in this Sewer Overflow Envelope.
- 4th: File this completed Sewer Overflow Envelope in accordance with City policy.
- 5th: Complete the Collection System Failure Analysis Form.
- 6th: Debrief the spill response with affected personnel, as appropriate, and make any necessary procedural changes.

For any media requests, immediately contact the Director Public Works at (408) 586-3345

City of Milpitas, CA

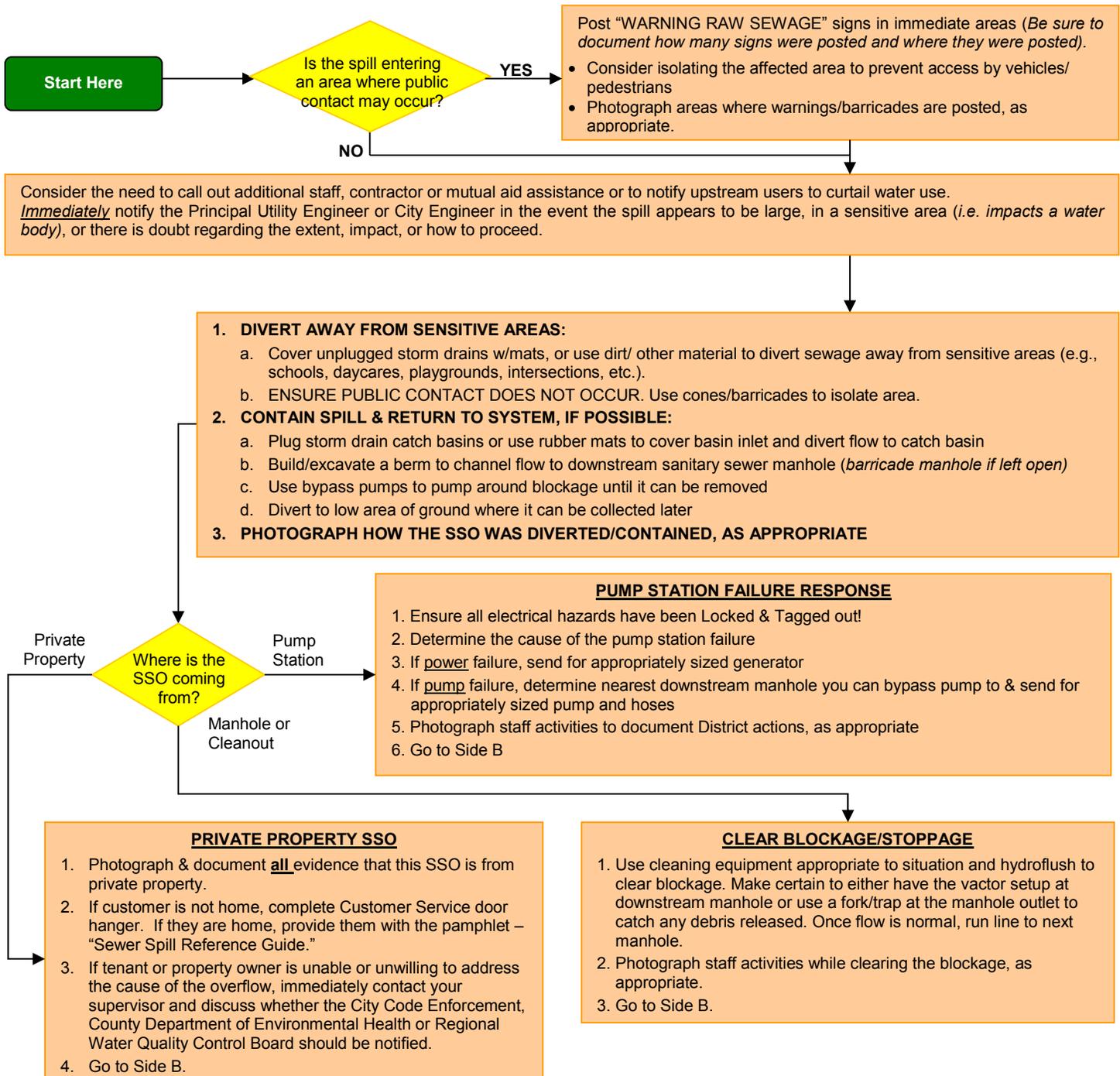
Sanitary Sewer Overflow and Backup Response Plan

© DKF Solutions Group 2004-2012 All rights reserved. Rev. 7/1/2012

<u>Form</u>	<u>Form Number</u>
Instructions and Chain of Custody	Envelope Label
Responding to a Sanitary Sewer Overflow	OP-1
Sewer Overflow Report	-OP-2
Collection System Failure Analysis Form	-OP-3
Sewer Spill Reference Guide	pamphlet
Sewer Maintenance Door Hangar	n/a
Public Posting Sign	n/a

For pre-assembled packets contact DKF Solutions Group at 707.373.9709 or losscontrol@sbcglobal.net

Responding to a Sanitary Sewer Overflow

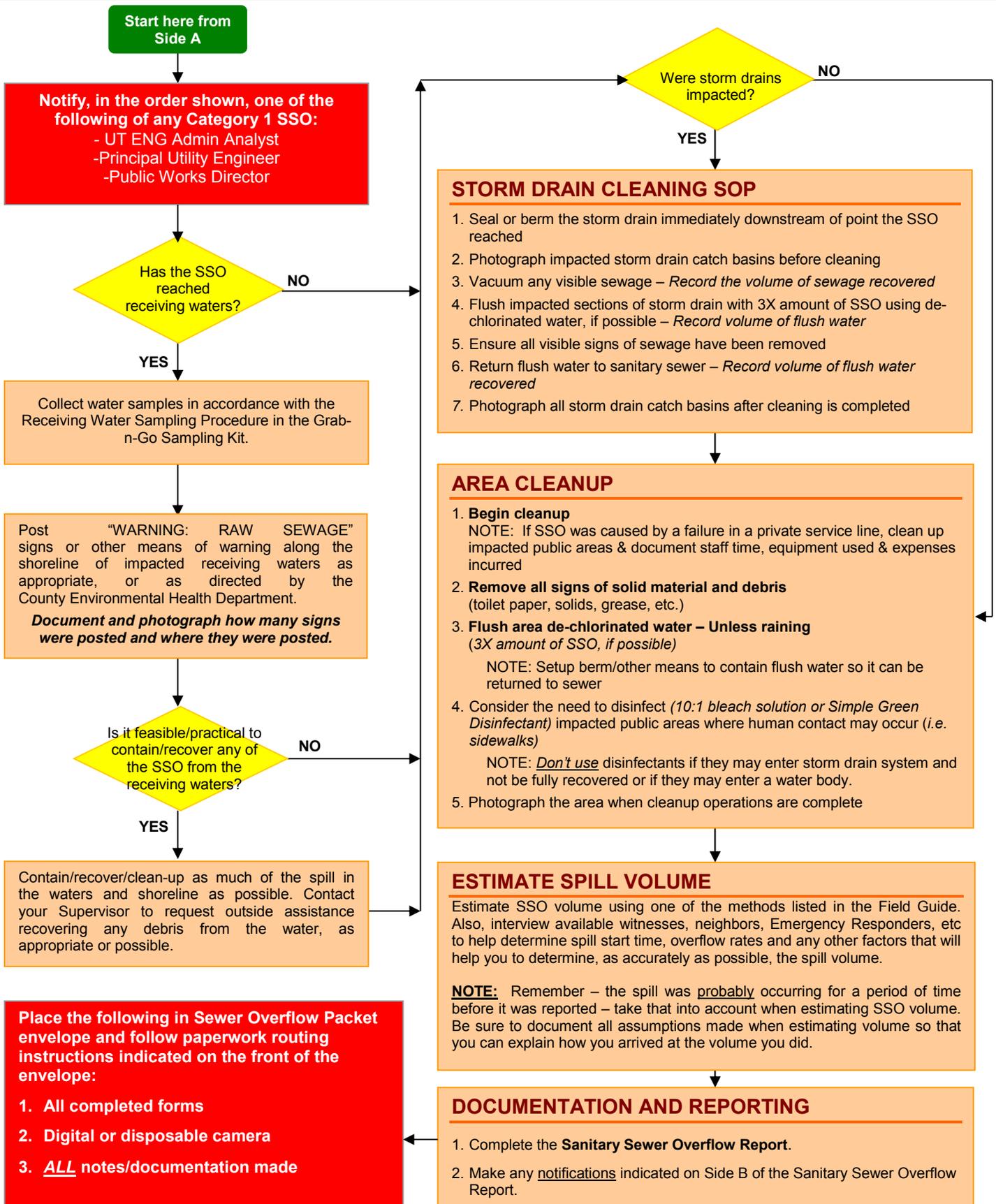
**MEDIA AND PUBLIC RELATIONS GUIDELINES:**

Exercise caution in contacts with the public or media when you respond to a spill. Any information you provide or statements you make may become pertinent in the event of possible court action. It is important to:

- Avoid giving out the wrong information,
- Avoid making accusations against customers, businesses or other public agencies,
- Avoid speculating about the situation you are responding to
- Avoid providing incorrect information about a company or other agency.

Be courteous and attempt to provide accurate information to questions within the limits above. In some cases, it may be appropriate to say that we do not have any information, or to delay answering a question and then to say when an answer might be available and from whom.

Responding to a Sanitary Sewer Overflow



INSTRUCTIONS: Complete all items EXCEPT those that are shaded graySpill Category (*check one*): Category 1 Category 2 Category 3**A. SPILL LOCATION**

Spill Location Name:

Latitude Coordinates:

Longitude Coordinates:

Street Name and Number:

Nearest Cross Street

City:

Zip Code:

County: Santa Clara

B. SPILL DESCRIPTIONSpill Appearance Point: Building/Structure Force Main Gravity Sewer Other Sewer System Structure (*i.e. cleanout*)
 Pump Station Manhole- Structure ID#: Other (*specify*):Did the spill reach a drainage channel and/or surface water? Yes (*Category 1*) NoIf the spill reached a storm sewer, was it fully captured and returned to the Sanitary Sewer? Yes No (*Category 1*)Was this spill from a private lateral? Yes No If YES, name of responsible party:Final Spill Destination: Beach Building structure Other paved surface Storm drain Street/curb& gutter
 Surface water Unpaved surface Other (*specify*):Estimated spill volume (*in gallons – 1,000gal or more = Category 1*): Method calculated:Est. volume of SSO recovered (gal): Were photos taken? No Yes – how many?

Estimated volume of spill reaching surface water, drainage channel, or not recovered from a storm drain (gal):

C. SPILL OCCURRING TIME

Estimated spill start date and time:

Date and time spill reported to sewer crew:

Date and time sewer crew arrived:

Estimated spill end date and time:

D. CAUSE OF SPILLLocation of Blockage: Main Lateral Private Lateral OtherSSO cause (*check all that apply*): Debris/Blockage Flow exceeded capacity Grease Operator error Roots
 Pipe problem/failure Pump station failure Rainfall exceeded design Vandalism Inflow/infiltration
 Animal carcass Electrical power failure Bypass Debris from laterals Construction Debris
 Other (*specify*):Weather conditions prior 72 hours: Sunny Weather Cloudy Weather Measurable Rain Rain for Several DaysIf SSO is caused by wet weather, choose size of storm: 1-yr 2-yr 5-yr 10-yr 50-yr 100-yr >100-yr Unknown

Diameter (in inches) of pipe at point of blockage/spill cause (if applicable):

Sewer pipe material at point of blockage/spill cause (if applicable):

Description of terrain surrounding point of blockage/spill cause: Flat Mixed Steep**E. SPILL RESPONSE**Spill response activities (check all that apply): Cleaned up Contained all/portion of spill TV inspection Restored flow
 Returned all/portion of spill to sanitary sewer Other (*specify*):

Spill response completed (date & time):

Name of impacted waters (if applicable):

Visual inspection result of impacted waters (if applicable):

Any fish killed? Yes No *if Yes, try to estimate number of fish killed:*Any ongoing investigation? Yes No

Name of impacted beach (if applicable):

Were health warnings posted? Yes No

Health warning/beach closure posting/details:

Were samples of impacted waters collected? Yes No If YES, select the analyses: DO Ammonia Bacti OtherRecommended corrective actions: Add sewer to PM Program Adjust PM schedule Adjust PM method Rehab sewer Replace sewer Enforcement action against FOG source Other (*specify*):**F. NOTIFICATION DETAILS**

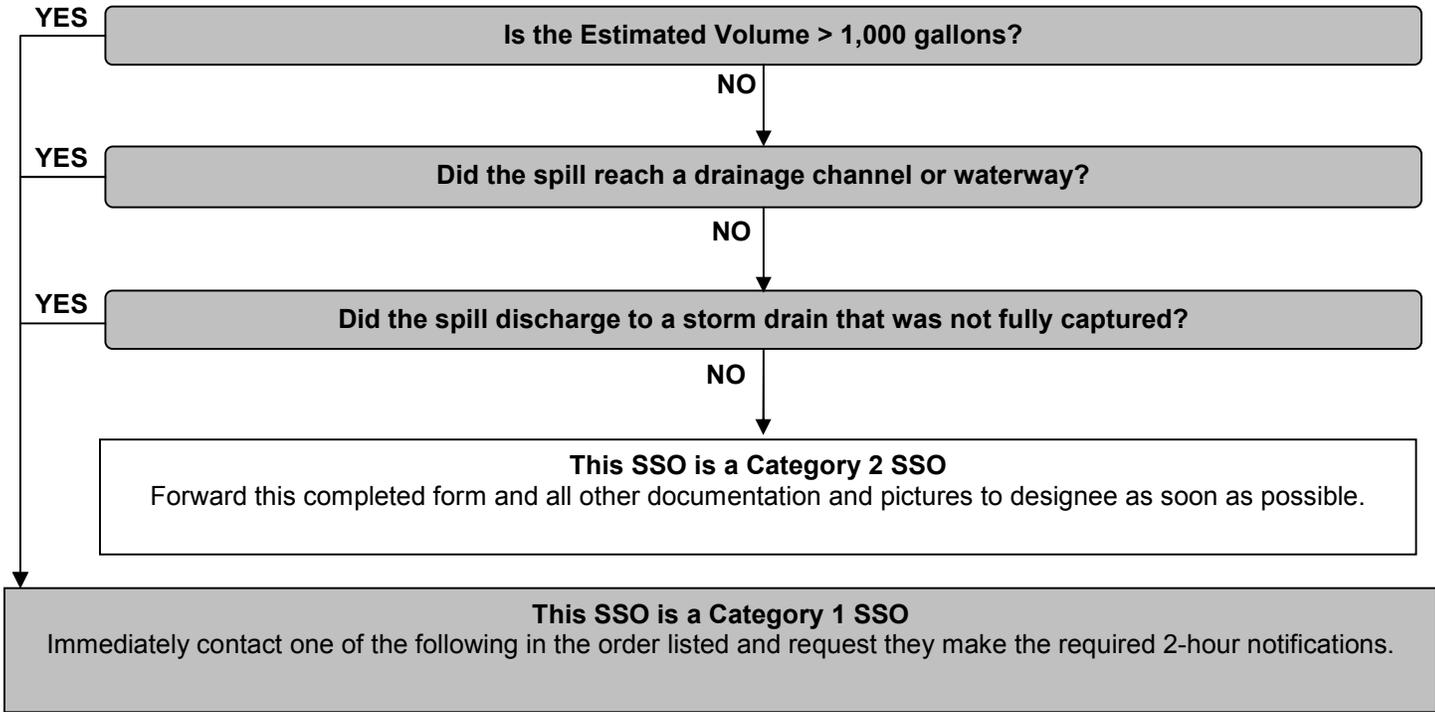
CalOES contacted date and time (if applicable):

CalOES Control Number (if applicable):

Spoke to:

GO TO SIDE B

REGULATORY NOTIFICATIONS START HERE



PERSON	CELL PHONE	BUSINESS HOURS	AFTER HOURS
Glen Campi		408.586.2643	408.690.3617
Steven Machida		408.586.3355	408.658.4841
Jeff Moneda		408.586.3345	408.908.0086

RECOMMENDED FOLLOW-UP ACTIONS TO PREVENT FUTURE OCCURRENCES

CURRENT PREVENTIVE MAINTENANCE FREQUENCY:	DATE OF LAST PREVENTIVE MAINTENANCE:
RECOMMENDED ACTIONS: <input type="checkbox"/> TV <input type="checkbox"/> REPAIR LINE SEGMENT <input type="checkbox"/> OTHER (describe):	<input type="checkbox"/> RE-RUN <input type="checkbox"/> CHANGE CLEANING SCHEDULE <input type="checkbox"/> REPLACE LINE SEGMENT

NOTES:

Incident Report #

Prepared By

SSO/Backup Information

Event Date/Time

Address

Volume Spilled

Volume Recovered

Cause

Summary of Historical SSOs/Backups/Service Calls/Other Problems

Date

Cause

Date Last Cleaned

Crew

Records Reviewed By

Record Review Date

Summary of CCTV Information

CCTV Inspection Date

Tape Name/Number

CCTV Tape Reviewed By

CCTV Review Date

Observations

Recommendations No Changes or Repairs Required Maintenance Equipment Maintenance Frequency Repair (Location and Type) Add to Capital Improvement Rehabilitation/Replacement List: Yes No

Supervisor Review Date

Superintendent Review Date

City of Milpitas
SSO/Backup Response Plan
Public Posting



DANGER

RAW SEWAGE • AVOID CONTACT

PELIGRO

AGUA CONTAMINADA • EVITE TODO CONTACTO

For more information

Para mas informacion

City of Milpitas

Business Hours: 408.586.2600

After 5pm M-F and on weekends: 408.586.2400



City of Milpitas

On (date) _____, at (location) _____,
we responded to a reported blockage of the
sanitary sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- The sanitary sewer lateral, which is your responsibility to maintain. We also found the City's portion of the lateral and the main to be flowing normally.

If you require assistance to clear your portion of the lateral you can look in the Yellow Pages of your telephone book under "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning". If you plan to hire a contractor we recommend getting estimates from more than one company.

City of Milpitas representative notes: _____

City of Milpitas Representative: _____

**For questions or comments, please call
City of Milpitas
408.586.2600**

**For Sewer Emergencies
at Night and on Weekends, please call
408.586.2400**



City of Milpitas

On (date) _____, at (location) _____,
we responded to a reported blockage of the
sanitary sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- The sanitary sewer lateral, which is your responsibility to maintain. We also found the City's portion of the lateral and the main to be flowing normally.

If you require assistance to clear your portion of the lateral you can look in the Yellow Pages of your telephone book under "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning". If you plan to hire a contractor we recommend getting estimates from more than one company.

City of Milpitas representative notes: _____

City of Milpitas Representative: _____

**For questions or comments, please call
City of Milpitas
408.586.2600**

**For Sewer Emergencies
at Night and on Weekends, please call
408.586.2400**

Appendix D

Muni Code

<https://library.municode.com/index.aspx?clientId=1649>

or just do a search on our web for muni code.

Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article I - Definitions >>

**Article I -
Definitions**

Section 1.00 - Definitions

Section 1.01 -

Section 1.02 -

Section 1.02.1 -

Section 1.03 -

Section 1.04 -

Section 1.05 -

Section 1.06 -

Section 1.07 -

Section 1.08 -

Section 1.09 -

Section 1.10 -

Section 1.11 -

Section 1.12 -

Section 1.13 -

Section 1.14 -

Section 1.15 -

Section 1.16 -

Section 1.17 -

Section 1.18 -

Section 1.19 -

Section 1.20 -

Section 1.21 -

Section 1.00 - Definitions

For the purpose of this Chapter, the terms used herein are defined as follows:

Section 1.01

CITY is the City of Milpitas.

(Ord. 208 (part), 6/17/80)

Section 1.02

CITY COUNCIL is the City Council of the City of Milpitas.

(Ord. 208 (part), 6/17/80)

Section 1.02.1

CITY ENGINEER is the Director of Engineering of the City of Milpitas.

(Ord. 208.17, 8/20/85)

Section 1.03

<p>COUNTY is the County of Santa Clara, California.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.04</p> <p>PERSON is any individual, firm, partnership, company, corporation, association or government agency.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.05</p> <p>STREET is any public highway, road, street, avenue, alley, way, easement or right of way.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.06</p> <p>TRUNK SEWER is the sewer in the street constructed to accommodate more than one Main Sewer.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.07</p> <p>MAIN SEWER is any sewer eight inches (8") or less in diameter in any public street to which the Side Sewer is to connect.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.08</p> <p>SIDE SEWER is the total length of sewer from the Main Sewer to the foundation of the structure to be connected.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.09</p> <p>HOUSE LATERAL is that portion of the Side Sewer within a public street.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.10</p> <p>HOUSE SEWER is that portion of the Side Sewer within private property.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.11</p> <p>DOMESTIC SEWAGE is defined as a combination of liquid or water carrying human or kitchen waste conducted away from the residence, business or institutional buildings.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.12</p> <p>INDUSTRIAL SEWAGE is defined as a combination of liquid or water-carried waste resulting from a manufacturing process employed in industrial establishments, including the washing, cleaning or drain water from such process. This includes laundry water from commercial establishments.</p> <p><i>(Ord. 208 (part), 6/17/80)</i></p>
<p>Section 1.13</p>

PREMISE is any lot, parcel of land, building or establishment.

(Ord. 208 (part), 6/17/80)

Section 1.14

USER is any owner or renter of any Premise connected to a Trunk Sewer or Main Sewer for the purpose of disposing of any sewage from said Premise.

(Ord. 208 (part), 6/17/80)

Section 1.15

INSTALLER is any person that installs main or trunk sewers within the discharge area for connection to City system.

(Ord. 208 (part), 6/17/80)

Section 1.16

CONNECTOR is any person that connects any Side Sewer or House Lateral to any Main or Trunk Sewer owned by City.

(Ord. 208 (part), 6/17/80)

Section 1.17

SEWER EXTENSION FUND is a fund to receive and disburse funds for the construction, repair, replacement, extension, acquisition or maintenance of sewer lines where, in the judgment of the City Council of the City of Milpitas, the use of said funds for said purpose is reasonable and necessary.

(Ord. 208 (part), 6/17/80)

Section 1.18

DISCHARGE AREA are those areas shown on Map VIII-2-1.18 (being the land encompassed within the MSD on June 30, 1980) together with any lands hereafter annexed to the City of Milpitas which may not be shown on said map.

(Ord. 208 (part), 6/17/80)

Section 1.19

REGULATE INDUSTRIAL USER. Any industrial user whose discharge into the sanitary sewer system over a twenty-four hour period exceeds 25,000 gallons, or whose discharge constitutes industrial waste of excessive strength.

(Ord. 208.5 (part), 8/4/81)

Section 1.20

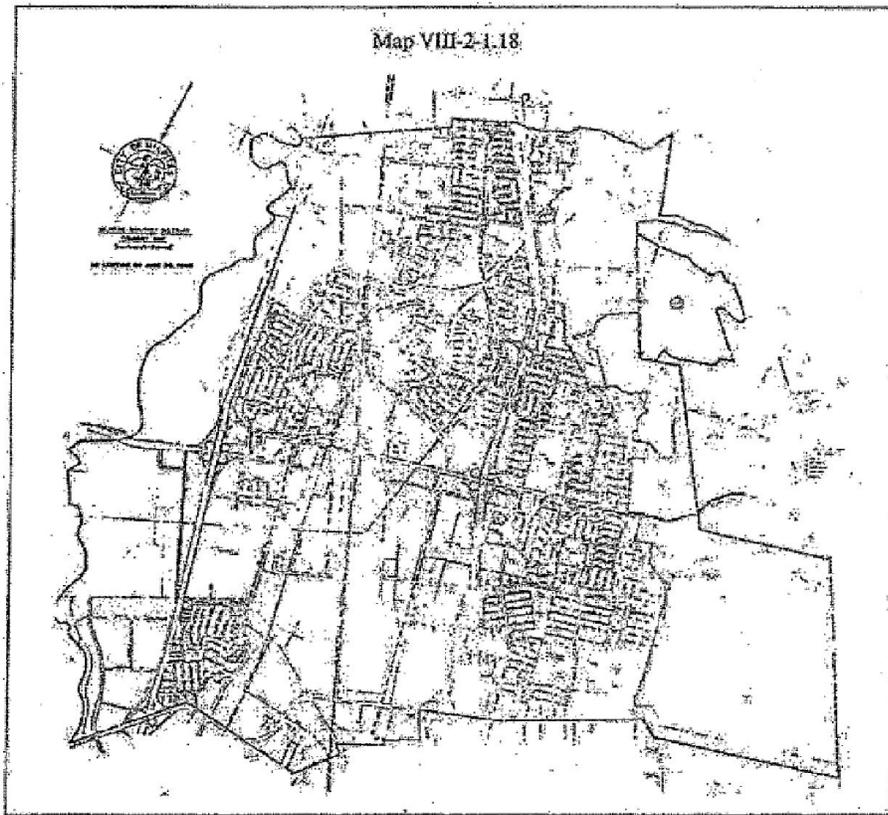
BASE AVERAGE DISCHARGE of a Regulated Industrial User shall mean either the highest monthly flow and B.O.D. loadings of such User recorded during the months of July, August, or September in 1978, 1979 or 1980 or the highest monthly flow and B.O.D. loadings recorded during July, August or September in any year thereafter, whichever is highest. Daily average flows and B.O.D. loadings, based on such highest monthly flow and loadings shall be calculated by the City Manager or his representative based on the number of working days per month according to data submitted by the User. In making such calculations, the City Manager shall presume five (5) working days per seven (7) day week unless an individual Regulated Industrial User submits to him, data in sufficient detail to indicate a different number of working days per seven (7) day week. Where data is unavailable, the City Manager shall assign as base average discharge to a Regulated Industrial User based on his best estimate of the highest likely daily average flow and loading of such User.

(Ord. 208.5 (part), 8/4/81)

Section 1.21

INTERFERENCE. Interference means, inhibition or disruption of the sewer system, treatment processes or operations of the sanitary sewer system which causes or significantly contributes to a violation of any requirement of the NPDES Permit, which is a permit issued to the City of San Jose pursuant to Section 402 of the Federal Water Pollution Control Act. Interference also includes prevention of sewage sludge use or disposal by the Sewage Treatment Plant in accordance with published regulations providing guidelines under Section 405 of the Act or in regulations developed pursuant to the Solid Waste Disposal Act (SWDA), the Clean Air Act, the Toxic Substances Control Act, or more stringent State regulations (including those contained in any State Sludge Management Plan prepared pursuant to Title IV of SWDA) applicable to the method of disposal or use employed by the Sewage Treatment Plant.

(Ord. 208.6 (part), 8/4/81)



Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article II - General Provisions >>

Article II - General Provisions

Section 2.01 - Rules and Regulations.
Section 2.02 - Purpose.
Section 2.03 - Ownership of Lines.
Section 2.04 - Contractor's Registration.
Section 2.05 - Same (Exception)
Section 2.06 - Contractor's Bonds and Insurance
Section 2.07 - Road Excavation Permits, Bonds Therefor
Section 2.08 - Construction
Section 2.09 - Trenches—Inspections
Section 2.10 - Barriers and Lights
Section 2.11 - Inspection—Previous Notice
Section 2.12 - Responsibility For Defects
Section 2.13 - Condemned Work
Section 2.14 - Liability
Section 2.15 - Drainage And Unpolluted Water Connections Prohibited

Section 2.01 - Rules and Regulations.

These rules and regulations, providing for the construction and use of sanitary sewer, the issuance of permits and fixing of fees therefor, the establishment of sewer rental charges and collections thereof, the providing for reimbursement of excess costs by the City of Milpitas, are hereby adopted and all matters with respect thereto shall be performed as herein specified and not otherwise.

(Ord. 208 (part), 6/17/80)

Section 2.02 - Purpose.

This chapter is intended to provide certain minimum standards, provisions and requirements for design, methods of construction and use of materials in the sanitary sewerage facilities hereafter installed, altered or repaired, the issuance of permits, the fixing fees therefor, providing for service charges and collections, providing for reimbursement of excess costs, and a penalty for violations of the provisions hereof.

(Ord. 208 (part), 6/17/80)

Section 2.03 - Ownership of Lines.

City will not provide sewer service by means of any trunk sewer, main sewer or house lateral to which it does not have full and complete title at the time of rendering such service.

(Ord. 208 (part), 6/17/80)

Section 2.04 - Contractor's Registration.

Except as provided in Section 2.08 hereof, it shall be unlawful for any person to install or construct any sanitary sewer or main connections to any sanitary sewer in public street or easement in discharge area who is not a master plumber or contractor, licensed under the State Contractor's License Law (Section 7000-7145 of the Business and Professional Code of the State of California).

(Ord. 208 (part), 6/17/80)

Section 2.05 - Same (Exception)

Section 2.04 shall not apply to work done solely in private property, but such work is subject to inspection by the City representative for workmanship and possible entrance of foreign material.

(Ord. 208 (part), 6/17/80)

Section 2.06 - Contractor's Bonds and Insurance

All such contractors and master plumbers must file a certificate of insurance with City showing adequate public liability and property damage insurance and worker's compensation insurance and must carry adequate bonds covering performance and labor and materials in amounts specified by the City to insure the protection of the City, its officers and employees.

(Ord. 208 (part), 6/17/80)

Section 2.07 - Road Excavation Permits, Bonds Therefor

No excavation shall be made in any State highway, County road, City street or other public roadway in the City unless and until an encroachment permit be issued therefor. Application for said permit shall be made at the Office of the City Engineer and shall be accompanied by a cash deposit or, if specifically approved by the City Council, a bond in an amount and in the form approved by the City.

(Ord. 208 (part), 6/17/80)

Section 2.08 - Construction

All construction shall be in accordance with the Standard Specifications approved by the City and on file in the Office of the City Engineer.

(Ord. 208 (part), 6/17/80)

Section 2.09 - Trenches—Inspections

All trenches shall be left open and all connections in the Side Sewers must be left uncovered for inspection until after the inspection has been made and the pipe laying accepted. Upon approval after such inspection, trenches shall be backfilled without delay and the street restored to its original condition.

(Ord. 208 (part), 6/17/80)

Section 2.10 - Barriers and Lights

Installer shall maintain such barriers, lights and signs as are necessary to give warning to the public at all times during construction and of any dangerous condition to be encountered in consequence thereof. He likewise shall protect the public, in the use of walkways, against any such condition in connection with the construction of Side Sewers.

(Ord. 208 (part), 6/17/80)

Section 2.11 - Inspection—Previous Notice

In all cases when any inspection is required, not less than twenty-four (24) hours notice shall be filed in the Office of the City Engineer stating the time when the work will be sufficiently advanced for inspection.

(Ord. 208 (part), 6/17/80)

Section 2.12 - Responsibility For Defects

All persons performing or permitted to perform work under this Chapter shall be held strictly responsible for any and all acts of agents or employees in connection with said work. Upon being notified in writing by the City of any defect arising therefrom in any sewer or of any violation of the provisions of this Chapter, the person or persons responsible for said work shall take immediate steps to correct such defect or violation.

(Ord. 208 (part), 6/17/80)

Section 2.13 - Condemned Work

In case any sewer work was inspected and any portion thereof condemned before acceptance by the City, a written notice to that effect shall be given informing the owner of the premises, or the agent of such owner, to make repairs necessary to place the sewer in satisfactory condition.

(Ord. 208 (part), 6/17/80)

Section 2.14 - Liability

Applicant shall be solely liable for any defects in the performance of his work or any failure which may develop therein.

(Ord. 208 (part), 6/17/80)

Section 2.15 - Drainage And Unpolluted Water Connections Prohibited

No person shall discharge or cause to be discharged any storm water, surface water, ground water, roof runoff, subsurface drainage, cooling water or unpolluted industrial process waters to any sanitary sewer of the City.

(Ord. 208 (part), 6/17/80)

Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article III - Main Sewers and Trunk Sewers >>

**Article III -
Main Sewers and Trunk Sewers**

Section 3.01 - Permit

Section 3.02 - Excess Cost

Section 3.03 - Construction by Installer or Connector

Section 3.04 - Refunds

Section 3.01 - Permit

Application for permission to construct a Main Sewer or Trunk Sewer in the discharge area shall be made to City. Responsibility for the design, specifications, methods of construction, and inspection of the sanitary sewerage facilities to be installed remains with the City. Installer's proposed sewerage system must conform to the Master Plan of Sewerage System for the general area as established by the City. All main sewer and trunk sewer extensions shall be performed by employees or contractors of City. Exceptions to this rule because of special conditions may be granted by the City Council.

Prior to calling of bids, connector or installer shall deposit with City an amount equal to all connection fees due. This deposit shall be in addition to the deposits required by Subsections A and B. If, on receipt of bids, installer decides not to proceed, he shall receive back his deposit, less any expense of City.

(Ord. 208 (part), 6/17/80)

Section 3.02 - Excess Cost

The following requirements shall be met prior to approval by City of any main sewer or trunk sewer extension project which involves credit for or reimbursement of excess cost:

- A. A special study of the project shall be made by City and a report including the following items shall be prepared for consideration by the City Council.
- (1) Impact on existing collection and treatment system.
 - (2) Impact on cost of operation.
 - (3) Revenue potential of the project.
 - (4) Special considerations as pertinent.

(Ord. 208 (part), 6/17/80)

Section 3.03 - Construction by Installer or Connector

The following requirements shall be met prior to approval by City of any main sewer or trunk sewer extension project which is to be constructed by persons other than employees or contractors of the City.

- A. Installer or connector shall furnish the City a plan and profile of the streets wherein the sewers are to be made and a map showing the topography of the land to be served. Installer or connector may prepare his own plans and specifications, call for his own bids, and let his own contract, but he shall not let any such contract until after receiving written approval of plans and specifications for the work by City; nor shall he permit the work to proceed until after arrangements have been made for inspection of the work by City.
- B. Installer or connector shall pay in advance all connection fees due and necessary plan checking and inspection fees and the City shall have the right to charge and the installer shall pay the standard engineering fees charged by City for such work as may be done by the City.

(Ord. 208 (part), 6/17/80)

Section 3.04 - Refunds

In the event of cancellation of a project for extension of main or trunk sewers for any reason, connector or installer may apply for and the City Council may, in its discretion, grant a refund of any fees or deposits previously paid by installer. In such event, City shall deduct from such refund that amount which the City Council determines to be proper in order to recompensate the City for costs incurred by it in connection with said project.

(Ord. 208 (part), 6/17/80)

Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article IV - Side Sewers: House Laterals and House Sewers >>

**Article IV -
Side Sewers: House Laterals and House Sewers**

Section 4.01 - Application for Permit

Section 4.02 - Sewer Connections

Section 4.03 - Permit Issuance Fees and Deposits

Section 4.04 - Sewage Backflow Protective Devices

Section 4.01 - Application for Permit

Application for the construction of Side Sewers, House Laterals or House Sewers shall be made to the City, who shall issue permits and conditions of construction therefor, in accordance with the rules and regulations of this Chapter.

(Ord. 208 (part), 6/17/80)

Section 4.02 - Sewer Connections

In the application for a permit to connect House Lateral to a Main Sewer, the applicant of the property to be served or the contractor representing the applicant shall advise the City the location of such connection and extent of such work, and shall state the day upon which such work shall be commenced. There shall be no deviation from the location and time as approved, except by prior permission of the City.

(Ord. 208 (part), 6/17/80)

Section 4.03 - Permit Issuance Fees and Deposits

The application must be approved and countersigned before work is commenced. Copy of the permit must be posted in a conspicuous place near the work on the job at all times. The City is authorized and directed hereby to collect all fees, deposits and service charges which, by the provisions of this Chapter are payable by the connector on or before the delivery of the permit to the connector. Cost of such work shall include compensation to City for time spent by its representatives in arranging and supervising said work.

(Ord. 208 (part), 6/17/80)

Section 4.04 - Sewage Backflow Protective Devices

Due to the topographical characteristics of certain areas within City, there exists the danger of damage to health and property resulting from the possibility of sewage overflow and back-flooding on public and private property. It is the purpose of this Chapter to protect the health and safety of the residents of the City and Discharge Area and to minimize the possibility of damage to property by requiring, where topographical conditions warrant it, the installation and maintenance of an approved sewage backflow protective device.

Where the elevation of the lowest floor containing gravity waste drainage plumbing of any structure connected, or to be connected to is less than one foot (1') above the surface elevation of the nearest upstream public sewer structure capable of overflow and relief of pressure (i.e. manhole, pressure relief, flushing inlet, or rodding inlet structure), there shall be installed and kept in operable condition at all times by the owner at his sole cost and expense, a sewage backflow protection device.

All sewage backflow protective devices shall be located in the manner, and meet the standards, prescribed in Standard Drawings at City, as said Standard Drawings now exists or may hereafter be amended.

Installation of such sewage backflow protective devices shall be under the supervision and inspection of the Building Inspection Department of the City.

It shall be unlawful for the owner to maintain any building sewer connection to the City's sewerage system without an approved sewage backflow protective device, as required by the provisions of this Chapter.

| | (Ord. 208.1, 3/17/81)

**Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS
SANITARY CODE >> Article V - General Provisions for Use of Public Sewers >>**

**Article V -
General Provisions for Use of Public Sewers 1231**

- [VIII-2-5.01 - Purpose of Chapter](#)
- [VIII-2-5.02 - Conflicts with the Plumbing Code](#)
- [VIII-2-5.03 - Responsibility for Enforcement](#)
- [VIII-2-5.04 - Definitions](#)
- [VIII-2-5.05 - Limitations on Point of Discharge](#)
- [VIII-2-5.06 - Authority to Limit Excess Industrial Use](#)
- [VIII-2-5.07 - Discharge into Storm Drain Prohibited](#)
- [VIII-2-5.08 - Regulation of Trucked or Hauled Waste](#)
- [VIII-2-5.09 - Protection from Accidental Discharge](#)
- [VIII-2-5.10 - Pretreatment by Owner](#)
- [VIII-2-5.11 - Monitoring Facilities](#)
- [VIII-2-5.12 - Stormwater and Other Waters](#)
- [VIII-2-5.13 - Obstructing or Injurious Substances](#)
- [VIII-2-5.14 - Flammable or Explosive Substances](#)
- [VIII-2-5.15 - Hot Substances](#)
- [VIII-2-5.16 - Grease](#)
- [VIII-2-5.17 - Solid or Viscous Matter](#)
- [VIII-2-5.18 - Corrosive Matter](#)
- [VIII-2-5.19 - Toxic Gases, Vapors or Fumes](#)
- [VIII-2-5.20 - Interfering Substances](#)
- [VIII-2-5.21 - Prohibition on Use of Diluting Waters](#)
- [VIII-2-5.22 - Suspended Solids—Dissolved Matter](#)
- [VIII-2-5.23 - Noxious or Malodorous Matter](#)
- [VIII-2-5.24 - Radioactive Matter](#)
- [VIII-2-5.25 - Colored Matter](#)
- [VIII-2-5.26 - Fixer Solution Prohibition](#)
- [VIII-2-5.27 - Garbage](#)
- [VIII-2-5.28 - Screened Industrial Wastes](#)
- [VIII-2-5.29 - Installation of Grease Control Devices](#)
- [VIII-2-5.30 - Maintenance and Operation of Grease Control Devices](#)
- [VIII-2-5.31 - Installation and Maintenance of Amalgam Separators](#)
- [VIII-2-5.32 - Mandatory Wastewater Discharge Permits](#)
- [VIII-2-5.33 - Delinquent Fees](#)
- [VIII-2-5.34 - Permit Application](#)
- [VIII-2-5.35 - Additional Information May Be Required for Permit Application](#)
- [VIII-2-5.36 - Permit Conditions](#)
- [VIII-2-5.37 - Permit Duration and Amendment](#)
- [VIII-2-5.38 - No Transfer of Wastewater Discharge Permit Allowed](#)
- [VIII-2-5.39 - Denial of Permit](#)
- [VIII-2-5.40 - Permit Revocation](#)
- [VIII-2-5.41 - Termination of Service and Permit Revocation](#)
- [VIII-2-5.42 - Appeals](#)
- [VIII-2-5.44 - Publication of Significant Industrial Users in Significant Noncompliance](#)
- [VIII-2-5.45 - Federal Pretreatment Regulations](#)
- [VIII-2-5.46 - Signature requirements](#)
- [VIII-2-5.47 - Record Keeping](#)

VIII-2-5.48 - Discharge ReportsVIII-2-5.49 - Falsification of InformationVIII-2-5.50 - Power to InspectVIII-2-5.51 - Correction of Violations; Collection of Costs; InjunctionVIII-2-5.52 - Civil Penalties**VIII-2-5.01 - Purpose of Chapter**

The purpose of this chapter is to:

- (a) Provide for and regulate the disposal of sanitary sewage into the sanitary sewer system of the City in such manner and to such extent as is reasonably necessary to maintain and increase the ability of the sanitary sewer system to handle and dispose of sanitary sewage;
- (b) Provide for and regulate the disposal of industrial wastes into the sanitary sewer system of the city in such manner and to such extent as may be reasonably necessary to maintain and increase the ability of such system to handle and dispose of industrial wastes without decreasing the ability of said system to handle and dispose of all sanitary sewage;
- (c) Prevent the introduction of pollutants into the sanitary sewer system which will pass through the treatment works of the San Jose/Santa Clara Water Pollution Control Plant (plant) to the San Francisco Bay, or otherwise be incompatible with such works or interfere with the ability of the plant to treat, discharge and recycle wastewater, or to use or dispose of plant biosolids;
- (d) Improve opportunities to recycle and reclaim treated effluent and wastewater sludge;
- (e) Protect the physical structures of the sanitary sewer system and the efficient functioning of its component parts;
- (f) Protect the City and its personnel, the personnel of the plant, and preserve and protect the health, safety and comfort of the public;
- (g) Enable the City to comply with all applicable laws, rules, regulations and orders of the State of California and of the United States;
- (h) Provide for the charging and collection of various fees and other charges reasonably necessary for the acquisition, construction, reconstruction, maintenance and operation of the sanitary sewer system of the City; and
- (i) Protect the environmental health of the San Francisco Bay.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.02 - Conflicts with the Plumbing Code

In the event of any conflicts or inconsistencies between the provisions of Chapter 7, Title II, and of this Chapter, the provisions of this Chapter shall control for regulation of the public portion of the sanitary sewer system.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.03 - Responsibility for Enforcement

The primary responsibility for enforcement of the provisions of this Chapter shall be vested in the City Engineer or his/her authorized representative or agent. Nothing herein is intended to restrict the City Attorney with respect to criminal or civil actions which may be taken to enforce this Chapter.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.04 - Definitions

The definitions set forth below shall govern the application and interpretation of this Chapter.

- (1) **Accidental Discharge.** "Accidental Discharge" means any discharge at a flow rate or concentration which could cause a violation of the discharge standards in this Chapter or any discharge of a non-routine, episodic nature, including but not limited to, an accidental spill or slug.
- (2) **Amalgam Separator.** "Amalgam Separator" means a device that: employs filtration, settlement, centrifugation, or ion exchange to remove dental amalgam and its metal constituents from a dental office vacuum system before it discharges to the sanitary sewer system; has been certified under the International Organization for Standardization's standard for amalgam separators as capable of removing a minimum of ninety-five (95) percent of dental amalgam at

- flow rates comparable to the flow rate of the actual vacuum suction system in operation; and does not have any automatic flow bypass.
- (3) **Amalgam Waste.** "Amalgam Waste" means and includes non-contact dental amalgam (dental amalgam scrap that has not been in contact with the patient); contact dental amalgam (including, but not limited to, extracted teeth containing amalgam); dental amalgam sludge captured by chairside traps, vacuum pump filters, screens, and other dental amalgam trapping devices; and used, leaking or unusable capsules containing dental amalgam.
 - (4) **Ammonia.** "Ammonia" means that form of nitrogen which is chemically definable as NH₃.
 - (5) **Audit Protocols.** "Audit Protocols" means the procedures to be followed in performing flow and pollutant audit studies.
 - (6) **Average Concentration.** "Average Concentration" means the concentration of a pollutant in an industrial user's discharge that is calculated by adding the concentrations of the particular pollutant in all composite samples taken during a given time period, including, but not limited to self-monitoring samples, and dividing the total by the number of samples taken.
 - (7) **Batch Discharge.** "Batch Discharge" means the discharge of wastewater resulting from an intermittent treatment process in which an identified amount of process wastewater is collected, treated to meet discharge standards, and released to the sanitary sewer system.
 - (8) **Best Management Practices.** "Best Management Practices" means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the introduction of pollutants to the sanitary sewer system which have been determined by the City Engineer or by the San Jose Director of Environmental Services to be cost effective for particular industry groups, business types, or specific industrial processes.
 - (9) **Biochemical Oxygen Demand or BOD.** "Biochemical Oxygen Demand" or "BOD" means the quantity of oxygen expressed in parts per million (ppm) by weight, utilized in the biochemical oxidation of organic matter under standard laboratory conditions for five (5) days at a temperature of twenty degrees Celsius (20°C).
 - (10) **Categorical Industrial User or CIU.** "Categorical Industrial User" or "CIU" means a source performing any categorical process subject to federal pretreatment standards, as described in 40 CFR 405-471, that has any connection to the sanitary sewer system.
 - (11) **Categorical Pretreatment Standard or Categorical Standard.** "Categorical Pretreatment Standard" or "Categorical Standard" means any regulation containing pollutant discharge limits promulgated by the U.S. Environmental Protection Agency that apply to specific categories of users and which appear in 40 CFR 405-471.
 - (12) **City Engineer.** "City Engineer," for the purpose of this Chapter, shall mean the City Engineer of the City of Milpitas or his/her authorized representative or agent.
 - (13) **Code of Federal Regulations or CFR.** "Code of Federal Regulations" or "CFR" refers to the Code of Federal Regulations as published by the Office of the Federal Register National Archives and Records Administration. Whenever a reference is made to any portion of said Code, or to any other federal regulation, such reference shall apply to all amendments and additions to such portion of said Code now or hereafter enacted.
 - (14) **Composite Sample.** "Composite Sample" means a sample that accurately represents the average pollutant concentration during a continuous time period.
 - (a) A flow-proportional or time-proportional sample may be obtained manually or automatically, and discretely or continuously. For manual compositing, at least six (6) individual samples from each sample point shall be combined and mixed to obtain one (1) composite sample; flow-proportion may be obtained either by varying the time interval between each discrete sample or the volume of each discrete sample.
 - (b) If multiple batches are discharged over a 24-hour period, then one sample shall be collected from each batch discharged in that 24-hour period and composited into a single sample. A single sample from a batch representing one (1) or more production days will be considered a single composite sample.
 - (15) **Continuous Discharge.** "Continuous Discharge" means a discharge which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance, process changes, or other similar activities.
 - (16) **Critical User.** "Critical User" means a discharger whose wastewater contains priority pollutants, or who discharges any waste which has the potential to cause interference in concentrations above those allowed in this Chapter or who discharges in excess of 100,000 gallons per day.
 - (17) **Dental Amalgam.** "Dental Amalgam" means an alloy of mercury with another metal used by dentists to fill cavities in teeth.
 - (18) **Diluting Waters.** "Diluting Waters" means non-contact cooling water, boiler blowdown, domestic sewage, groundwater, stormwater, surface drainage, reverse osmosis reject, or potable waters which are not part of an industrial process and which do not contain priority pollutants but are combined with industrial wastewater prior to the monitoring point for industrial wastewater

- discharge. "Diluting Waters" also includes excess water used in rinse tanks when not in production.
- (19) **Discharger.** "Discharger" means any person discharging wastewater into the sanitary sewer system.
- (20) **Domestic Wastewater.** "Domestic Wastewater" means wastewater from private residences and other premises resulting from the use of water for personal washing, sanitary purposes or the elimination of human wastes and related matter.
- (21) **Existing Source.** "Existing Source" means any source of discharge that is not a new source.
- (22) **Fixer Solution.** "Fixer Solution" means a solution containing silver used in the photographic processing of dental X-rays, X-rays, and photographs.
- (23) **Food Service Establishment.** "Food Service Establishment" means a commercial discharger that prepares and/or sells food for consumption either on or off the premises or washes utensils or dishes on premises that may contribute grease to the sanitary sewer system, including, but not limited to, restaurants, sandwich shops, delicatessens, bakeries, cafeterias, markets, bed and breakfast inns, motels, hotels, meeting halls, caterers, retirement and nursing homes, and pizzerias. The term, as used in this Chapter, does not refer to food stores or establishments that do not prepare food on premises and do not process food in a manner which may contribute grease to the sanitary sewer system. A food service establishment shall be deemed to be contributing grease to the sanitary sewer system where a sanitary sewer overflow has occurred due to grease, or there has been a loss of twenty-five (25) percent or more of sewer line capacity due to grease, downstream of the food service establishment.
- (24) **Garbage.** "Garbage," as used in this chapter, means waste from preparing, cooking and dispensing of foods, and from the handling, storing and selling of produce.
- (25) **Grab Sample.** "Grab Sample" means a single discrete sample collected at a particular time and place that represents the composition of the wastestream only at that time and place.
- (26) **Grease.** "Grease" means liquid or other waste containing floatable and/or dispersed grease, vegetable oil, petroleum oil, non-biodegradable cutting oil; or fat, oil or grease product of animal, vegetable or mineral origin which is detectable and measurable using analytical test procedures established in 40 CFR 136.
- (27) **Grease Control Device.** "Grease Control Device" means a grease interceptor, grease trap, mechanical grease removal device or other device recommended by the San Jose Director of Environmental Services and approved for use by the City Engineer.
- (28) **Grease Interceptor.** "Grease Interceptor" means a tank installed underground and designed to collect and control solid-food wastes and floating-grease from wastewater prior to discharge into the sanitary sewer system. Grease interceptors are normally installed outside the building and use gravity to separate grease from the wastewater as it moves from one compartment of the interceptor to the next.
- (29) **Grease Trap.** "Grease Trap" means a device placed under or in close proximity to sinks or other fixtures likely to discharge grease to separate, trap and hold grease substances.
- (30) **Industrial User.** "Industrial User" means any non-residential user that discharges industrial wastes to the sanitary sewer system.
- (31) **Industrial Wastes.** "Industrial Waste(s)" means the wastes produced by industrial users from producing, manufacturing, and processing operations of every kind and nature.
- (32) **Interference.**
- (a) "Interference" means a discharge which alone, or in conjunction with a discharge or discharges from other sources, inhibits or disrupts the processes or operation of the sanitary sewer system, including the plant, or causes or significantly contributes to a violation of any requirement of the National Pollutant Discharge Elimination System (NPDES) permit, which is a permit issued to the plant pursuant to Section 402 of the Clean Water Act.
- (b) "Interference" also includes prevention of biosolids use or disposal by the plant in accordance with published regulations providing guidelines under Section 405 of the Clean Water Act or in regulations developed pursuant to the Solid Waste Disposal Act (SWDA), the Clean Water Act, the Toxic Substances Control Act, or more stringent state regulations (including those contained in any state biosolids management plan prepared pursuant to Title IV of SWDA) applicable to the method of disposal or use employed by the plant.
- (33) **Low Flow Discharger.** "Low Flow Discharger" means an industrial discharger whose average process flow, as shown on the dischargers' application to discharge and as measured as a rolling six-month average, is less than one thousand (1,000) gallons per day.
- (34) **Maximum Allowable Concentration.** "Maximum Allowable Concentration" means the highest permissible concentration or other measure of pollutant magnitude taken at a specific point in time or period of time.
- (35)

Mechanical Grease Removal Device. "Mechanical Grease Removal Device" means a power-operated device or combination of devices using electrical equipment to heat, filter, siphon, skim or otherwise separate and retain floating grease and solid food waste from wastewater prior to discharge from the trap to the sanitary sewer system.

- (36) **New Source.** "New Source" means:
- (a) Any building, structure, facility or installation from which there is (or may be) a discharge of pollutants, the construction of which commenced after the publication of proposed Pretreatment Standards under Section 307(c) of the Clean Water Act that will be applicable to such source if such Standards are thereafter promulgated in accordance with that section, provided that:
 1. The building, structure, facility, or installation is constructed at a site at which no other source is located; or
 2. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
 3. The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.
 - (b) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of subsection (36)(a)2. or (36)(a)3. above but otherwise alters, replaces, or adds to existing process or production equipment.
 - (c) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:
 1. Begun, or caused to begin, as part of a continuous onsite construction program:
 - A. Any placement, assembly or installation of facilities or equipment; or
 - B. Significant site preparation work, including clearing, excavating, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
 2. Entered into a building contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.
- (37) **Owner.** "Owner" means any person who owns private premises that contain a source as defined in this section.
- (38) **Operator.** "Operator" means any person who owns, leases, operates, controls, or supervises a source as defined in this section.
- (39) **Pass-Through.** "Pass-Through" means a discharge which exits the plant into waters of the United States in quantities or concentrations which alone, or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the plant's NPDES permit, including an increase in the magnitude or duration of a violation.
- (40) **pH.** "pH" means the logarithm of the reciprocal of the concentration of hydrogen ions in moles per liter of solution.
- (41) **Plant.** "Plant" means the San Jose/Santa Clara Water Pollution Control Plant, jointly owned by the Cities of San Jose and Santa Clara and operated by the City of San Jose Department of Environmental Services.
- (42) **Pretreatment Standard.** "Pretreatment Standard" means prohibited discharge standards, categorical pretreatment standards, and local limits.
- (43) **Pretreatment Requirements.** "Pretreatment Requirements" means any substantive or procedural requirement related to pretreatment imposed on an industrial user other than a pretreatment standard.
- (44) **Priority Pollutants.** "Priority Pollutants" means all pollutants as defined by the "General Pretreatment Regulations" of the U.S. Environmental Protection Agency, found at 40 CFR 401 and 403.
- (45) **Process Flow.** "Process Flow" means the daily, twenty-four-hour, flow of wastewater from any kind or nature of production, manufacturing or processing operation, including industrial and commercial operations where water is used for the removal of any type of waste other than sanitary sewage. "Process Flow" does not include diluting waters.
- (46) **Reasonable Control Measures.** "Reasonable Control Measures" means control technologies, Best Management Practices, source control practices and waste minimization procedures which

- prevent or reduce the introduction of pollutants to the sanitary sewer system and are recommended by the San Jose Director of Environmental Services and approved by the City Engineer to be cost effective for particular industry groups, business types or specific industrial processes.
- (47) **San Jose Director of Environmental Services.** "San Jose Director of Environmental Services," for the purposes of this Chapter, shall mean the City of San Jose's Director of Environmental Services or his/her authorized representative or agent, the designated operator of the plant.
- (48) **Sanitary Sewage.** "Sanitary sewage" means water-carried wastes from residences, business buildings, institutions and industrial establishments, excluding groundwaters, surface waters, stormwaters, subsurface drainage and industrial waste.
- (49) **Sanitary Sewer Overflow.** "Sanitary Sewer Overflow" is any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system, including overflows or releases that reach waters of the United States; overflows or releases that do not reach waters of the United States; and backups into buildings and/or private property caused by conditions within the publicly-owned portion of the sanitary sewer system.
- (50) **Sanitary Sewer System.** "Sanitary Sewer System" means all sewers, pump stations, and other facilities of the collection system owned or operated by the City of Milpitas and all plant facilities operated by the City of San Jose that together serve to carry, collect, pump, treat and dispose of sanitary sewage and industrial wastes.
- (51) **Sewer.** "Sewer" means a pipe or conduit for carrying sewage.
- (52) **Significant Change.** "Significant Change" means any change in an industrial user's operation that results in any of the following:
- (a) A flow that exceeds the expected peak flow as shown in the sewage treatment plant connection allocation for the property on which the industrial user is located.
 - (b) An increase in average process flow of twenty-five (25) percent over the industrial user's average process flow for the dischargers' most immediate preceding compliance period.
 - (c) Adding or deleting process discharge or sample points.
- (53) **Significant Industrial User.** "Significant Industrial User" means:
- (a) An industrial user that has processes subject to categorical pretreatment standards; or
 - (b) An industrial user that:
 1. Discharges an average of twenty-five thousand (25,000) gallons per day or more of process wastewater to the sanitary system (excluding sanitary, non-contact cooling and boiler blowdown wastewater); or
 2. Contributes a process wastestream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the plant; or
 3. Is designated as such by the San Jose Director of Environmental Services on the basis that it has a reasonable potential for adversely affecting the plant's operation or for violating any pretreatment standard or requirement.
- (54) **Significant Noncompliance.** An industrial user is in "Significant Noncompliance" if it has a violation or violations meeting one or more of the following criteria:
- (a) Chronic violations of wastewater discharge limits defined here as those in which sixty-six (66) percent or more of all the measurements taken during a six-month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l);
 - (b) Technical review criteria (TRC) violations, defined here as those in which thirty-three (33) percent or more of all the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the numeric pretreatment standard or requirement, including instantaneous limits, as defined by 40 CFR 403.3(l), multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);
 - (c) Any other violation of a pretreatment standard or requirement as defined by 40 CFR 403.3(l) (daily maximum, long-term average, instantaneous limit, or narrative standard) that the director determines has caused, alone or in combination with other discharges, interference or pass-through (including endangering the health of the director, personnel or the general public);
 - (d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or environment, or has resulted in the plant's exercise of its emergency authority to halt or prevent such a discharge;
 - (e) Failure to meet, within ninety (90) days after the scheduled due date, a compliance schedule milestone contained in a discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance;
 - (f) Failure to provide, within forty-five (45) days after the due date, required reports such as baseline monitoring reports; ninety-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

- (g) Failure to accurately report noncompliance; and
 - (h) Any other violation or group of violations, which may include a violation of reasonable control measures, which the San Jose Director of Environmental Services determines will adversely affect the operation or implementation of the pretreatment program.
- (55) **Slug Load or Slug Discharge.** "Slug Load" or "Slug Discharge" means any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or non-customary batch discharge, which has a reasonable potential to cause interference or pass-through or in any other way cause a violation of the provisions of this Chapter or applicable permit conditions.
- (56) **Source.** "Source" means any building, structure, facility or installation from which there is or may be a potential as identified by the San Jose Director of Environmental Services and determined by the City Engineer to discharge pollutants above the local limits included in this Chapter or state or federal limits or wastewater of such volume or strength that it may cause interference, pass-through or operational problems in the sanitary sewer system or at the plant.
- (57) **Standard Discharger.** A "Standard Discharger" means any industrial discharger who is not a low flow discharger.
- (58) **Standard Methods.**
- (a) "Standard Methods" means the procedures set forth in the CFR, unless another method for the analysis of industrial wastewater has been approved, in writing, in advance of use of the procedure by the San Jose Director of Environmental Services.
 - (b) All analyses shall be performed by a laboratory certified by the state for the specific pollutants and matrix to be analyzed, unless otherwise approved in writing, by the San Jose Director of Environmental Services, prior to performance of a sample analysis.
- (59) **Stormwater.** "Stormwater," as used in this Chapter, means the flow across any surface or in storm drains resulting from rainfall.
- (60) **Suspended Solids.** "Suspended Solids" means solids that either float on the surface of, or are suspended in, water, sewage, or other liquids and which are removable by laboratory filtering.
- (61) **Total Toxic Organics or TTOs.** "Total Toxic Organics" or "TTOs" are the sum of the concentrations of each of the regulated toxic organic compounds listed at 40 CFR 401.15 and are found in the discharge at a concentration greater than ten (10) micrograms per liter. Some categorical standards (40 CFR 405-471) list the specific toxic organic compounds that are to be included in the summation.
- (62) **Trucked or Hauled Waste.** "Trucked or Hauled Waste" means any waste discharged into the sanitary sewer system after being placed in a motorized vehicle for removal from the location where the waste was generated or produced.
- (63) **Yellow Grease.** "Yellow Grease" means grease which is associated with food preparation or processing, which has not been contaminated with wash water or chemicals, or by being spilled or otherwise fouled.
- (64) **Zero Discharger.** "Zero Discharger" means an industrial facility that does not discharge any wastewater except domestic wastewater into the sanitary sewer system.

(Ord. No. 208.45, § 2, 12-1-09)

SEWER USE REGULATIONS

VIII-2-5.05 - Limitations on Point of Discharge

No person shall discharge any substances directly into a manhole or other opening into a City sewer other than through a City-approved sewer connection.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.06 - Authority to Limit Excess Industrial Use

- (a) Unless approved by the City Council, no industrial connection shall be allowed if the City Engineer estimates that said connection will have an estimated flow which exceeds either twelve thousand (12,000) gallons per day per acre or eight-tenths (0.8) gallons per day per square foot of building area. However, the City Council may approve or disapprove said connection, notwithstanding the above, after a public hearing upon published notice (in accordance with Section I-20-2.05 of the Milpitas Municipal Code) considering the following criteria:
1. Whether the specific use will overload the City's sewer collection system or the contractually available treatment capacity;
 2. Whether the specific use will require an inequitable appropriation of water and sewage capacity compared to present and reasonably anticipated future needs of the other existing or future users (individual, commercial or industrial); or
 - 3.

Whether the specific use will hamper the present and future development of land or facilities because the use preempts capacity required by said development.

- (b) The City Council may require any applicant for an excess use connection to provide the City with a sewer master plan study by a consultant approved by the City and paid for by the applicant. The scope of said study shall be determined by the City. The City may impose a reasonable fee for filing of any application hereunder. The City Council may impose conditions upon the grant of said application to protect and provide for the City's present and future water availability and sewage treatment capacity.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.07 - Discharge into Storm Drain Prohibited

It shall be unlawful to discharge any sewage, Industrial Waste or other polluted waters into any storm drain, natural outlet or channel without a valid National Pollutant Discharge Elimination System permit issued by the State of California.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.08 - Regulation of Trucked or Hauled Waste

No person shall discharge, cause, allow or permit any Trucked or Hauled Waste to be discharged into the sanitary sewer system, except at a site specifically designated in a wastewater discharge permit issued pursuant to this Chapter.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.09 - Protection from Accidental Discharge

- (a) Each industrial user shall provide protection from accidental discharge of prohibited materials or other wastes regulated by this Chapter into either the storm drain or sanitary sewer system.
- (b) Facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the industrial user's expense.
- (c) All industrial users shall notify the City and plant personnel by telephone or in person within one (1) hour of becoming aware of accidentally discharging wastes of reportable quantities as determined in 40 CFR 117 or discharge of any substance, which, if otherwise disposed of would be a hazardous waste under 40 CFR Part 261, to enable countermeasures to be taken by the City to minimize damage to the sanitary sewer collection system, plant or treatment processes, and the receiving waters. If hazardous waste is discharged, the industrial user shall be subject to all requirements in 40 CFR 403.12(p).
- (d) Telephone notification shall be followed, within five (5) days of the date of occurrence, by a detailed written statement to the City Engineer and to the San Jose Director of Environmental Services describing the causes of the accidental discharge and the measures being taken to prevent future occurrences.
- (e) Notification to the City and/or to the City of San Jose will not relieve industrial users of notification requirements under any other federal, state or local law; nor of liability for any expense, loss, or damage to the storm drain system, sanitary sewer collection system, plant, treatment process, or receiving waters; or from any fines or penalties imposed on the City or the plant on account thereof under applicable provisions of liability for state or federal law.
- (f) All permitted facilities must maintain a spill control plan for protection against accidental discharges, including, but not limited to, berming of chemical and waste material storage areas. The review of such plans and procedures by the city and/or plant personnel shall not relieve the industrial user from the responsibility of modifying the facility as necessary to provide the protection necessary to meet the requirements of this Code or other state or federal regulations.
- (g) This plan must be reviewed and revised as needed within thirty (30) days after an accidental discharge has occurred or as required by the City Engineer or the San Jose Director of Environmental Services.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.10 - Pretreatment by Owner

Each owner shall, at the owner's own expense, provide such treatment or take such other measures as the Chief Building Official may require to prevent accidental discharge; and to reduce objectionable characteristics, contents, or rates of discharge into the sanitary sewer system to prevent damage to or interference with the sanitary sewer system.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.11 - Monitoring Facilities

- (a) The City Engineer may require any discharger to the sanitary sewer system to construct, at the discharger's own expense, and at an approved location, monitoring facilities to allow inspection, sampling and flow measurement of the building sewer or internal drainage systems.
- (b) The discharger shall maintain the monitoring facilities, sampling and measurement equipment and access thereto at all times in a safe and proper operating condition at the discharger's expense.
- (c) Any required monitoring facilities shall be specified in the wastewater discharge permit issued pursuant to this Chapter.
- (d) Dischargers shall retain sufficient wastewater in their sample boxes at all times to allow sample collection representative of the last wastewater discharge.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.12 - Stormwater and Other Waters

- (a) No person shall discharge, cause, allow or permit any stormwater, surface water or roof runoff to be discharged into the sanitary sewer system.
- (b) No person shall discharge, cause, allow or permit any groundwater or subsurface drainage to be discharged into the sanitary sewer system without a wastewater discharge permit issued by the plant specifically for such discharge and an encroachment permit issued by the City.
- (c) A wastewater discharge permit for the discharge of groundwater or subsurface drainage shall only be issued if there is no reasonable alternative method for disposal of such water.
- (d) If permitted, discharge of groundwater or subsurface drainage shall be subject to all applicable requirements of this Chapter, including but not limited to the payment of applicable permit fees and such terms and conditions as the City Engineer and the San Jose Director of Environmental Services may impose on the wastewater discharge permit.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.13 - Obstructing or Injurious Substances

No person shall discharge, cause, allow or permit to be discharged, thrown or deposited into the sanitary sewer system or any part thereof, or into any plumbing fixture or private sewer or drain connected either directly or indirectly to the sanitary sewer system, any substance of any kind whatsoever tending to obstruct or injure the sanitary sewer system, or to cause a nuisance or hazard, or which will in any manner interfere with the proper operation and maintenance of the sanitary sewer system.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.14 - Flammable or Explosive Substances

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system any wastewater containing any flammable liquid, solid, vapor, gas or other substance, including, but not limited to any substance having a closed cup flashpoint of less than one hundred forty degrees Fahrenheit (140°F) or sixty degrees Celsius (60°C), using the latest test methods specified in 40 CFR 261.21.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.15 - Hot Substances

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system any liquid, solid, vapor, or gas having or developing a temperature of one hundred fifty degrees Fahrenheit (150°F) or more, or which may cause the temperature of wastewater at the Plant to exceed one hundred four degrees Fahrenheit (104°F).

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.16 - Grease

- (a) No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system any liquid or other waste containing grease in excess of one hundred fifty (150) parts per million by weight.
- (b) No person shall discharge, cause, allow, or permit any grease discharge from a food service establishment into the sanitary sewer system, unless such discharge has first been processed through an approved grease control device.
- (c)

No person shall discharge, cause, allow, or permit to be discharged any yellow grease, or any waste or material mixed with yellow grease, into the sanitary sewer system from a food service establishment. No yellow grease from a food service establishment shall be mixed with grease trap or grease interceptor waste.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.17 - Solid or Viscous Matter

No person shall discharge, deposit, throw, or cause to be discharged, deposited or thrown into the sanitary sewer system or any part thereof any ashes, cinders, pulp, paper, sand, cement, soil, mud, straw, shavings, metal, glass, rags, feathers, tar, asphalt, resins, plastics, wood, animal hair, paunch manure, or any heavy solid or viscous substance capable of causing obstruction to the flow in the sanitary sewer system or any part thereof, or which would interfere with the proper operation of the plant or the treatment of sanitary sewage or industrial waste.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.18 - Corrosive Matter

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof any liquid, solid, vapor, or gas having or causing a pH lower than six (6.0) or more than twelve and one-half (12.5) or having any other corrosive property capable of causing damage or hazard to the sanitary sewer system, or to any personnel operating, maintaining, repairing, constructing or working in or about said sanitary sewer system.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.19 - Toxic Gases, Vapors or Fumes

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system any substance of any kind whatsoever which results in the presence of toxic gases, vapors or fumes within the sanitary sewer system in a quantity that may cause acute health and/or safety problems for workers in the sanitary sewer system.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.20 - Interfering Substances

(a) No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof any industrial waste containing any of the following toxic substances exceeding the concentrations set forth below:

Toxic Substance	Standard Discharger Maximum Allowable Concentration	Low Flow Discharger Maximum Allowable Concentration
Antimony	5.0 mg/l	5.0 mg/l
Arsenic	1.0 mg/l	1.0 mg/l
Beryllium	0.75 mg/l	0.75 mg/l
Cadmium	0.7 mg/l	0.7 mg/l
Chromium, Total	1.0 mg/l	1.0 mg/l
Copper	2.3 mg/l	2.7 mg/l
Cyanides	0.5 mg/l	0.5 mg/l
Lead	0.4 mg/l	0.4 mg/l
Mercury	0.010 mg/l	0.010 mg/l
Nickel	0.5 mg/l	2.6 mg/l
Phenol and derivatives	30.0 mg/l	30.0 mg/l
Selenium	1.0 mg/l	1.0 mg/l
Silver	0.7 mg/l	0.7 mg/l
Zinc	2.6 mg/l	2.6 mg/l

(b) No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof, any toxic or poisonous substances or any other pollutant or waste constituent, including biochemical oxygen demand, in sufficient quantity to injure or cause an interference with the sewage treatment process, or pass-through the plant, or in sufficient quantity to constitute a hazard to

humans or animals, or in sufficient quantity to create a hazard for humans, or aquatic life in any waters receiving effluent from the sanitary sewer system, or which may create a hazard in the use or disposal of sewage sludge.

- (c) All samples, both grab and composite, shall demonstrate compliance with the above limits.
- (d) Any industrial user that violates any of the interfering substances limits must resample and submit sample reports for all pollutants in violation of any applicable permit limits or any other pollutants as required by the San Jose Director of Environmental Services within thirty (30) days of becoming aware of the violation.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.21 - Prohibition on Use of Diluting Waters

The use of diluting waters as a partial or complete substitute for adequate treatment, to achieve compliance, or to meet local limitations for wastewater as set forth in Section 5.20, or to avoid or minimize any requirements imposed in a wastewater discharge permit is prohibited.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.22 - Suspended Solids—Dissolved Matter

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof any liquid containing suspended solids or dissolved matter of such character and quantity that unusual attention or expense is required to handle, process, or treat such matter at the plant.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.23 - Noxious or Malodorous Matter

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof any solid, liquid, vapor, or gas which is so malodorous or noxious that its discharge into the sanitary sewer system would cause a public nuisance.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.24 - Radioactive Matter

No person shall discharge, cause, allow, or permit to be discharged any radioactive waste into the sanitary sewer system, except, that:

- (a) Persons authorized to use radioactive materials by the State Department of Public Health or other governmental agency empowered to regulate the use of radioactive materials may discharge, cause to be discharged, or permit to be discharged such wastes, provided that such wastes are discharged in strict conformance with the California radiation control regulations (California Code of Regulations, Title 17, Chapter 5, Subchapter 4), and federal regulations and recommendations for safe disposal of such wastes; and
- (b) The person so acting does so in compliance with all applicable rules and regulations of all other regulatory agencies having jurisdiction over such discharges.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.25 - Colored Matter

No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system any wastewater with objectionable color not removed in the treatment process such as, but not limited to, dye wastes and vegetable tanning solutions.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.26 - Fixer Solution Prohibition

No person shall discharge, cause, allow, or permit fixer solution to be discharged into the sanitary sewer system without prior pretreatment to meet all applicable limits.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.27 - Garbage

- (a) No person shall discharge, cause, allow or permit to be discharged, deposited, or thrown into the sanitary sewer system any garbage, fruit, vegetable, animal, or other solid material from any industrial plant or retail grocery store, irrespective of whether or not it first passed through a mechanical grinder.
- (b) No person shall install, operate, use or maintain upon the premises of any food-processing plant, or any industrial plant or retail grocery store, any mechanical grinder or waste grinder that is connected directly or indirectly to the sanitary sewer system.
- (c) No person shall discharge, deposit, throw or cause, allow or permit to be discharged, deposited, or thrown into the sanitary sewer system any garbage, fruit, vegetable, animal or other solid kitchen waste material resulting from the preparation of any food or drinks, in any dwelling, restaurant or eating establishment, unless the same shall have first been passed through a mechanical garbage or waste grinder in conformance with the provisions of Chapter II-7, Uniform Plumbing Code of the City of Milpitas Municipal Code.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.28 - Screened Industrial Wastes

- (a) No person shall discharge, cause, allow or permit to be discharged into the sanitary sewer system or any part thereof any garbage, fruit, vegetable, animal, or other solid industrial wastes resulting from the processing, packaging, or canning of fruits, vegetables, or other foods or products, unless such wastes have first been passed through screens having openings not exceeding one thirty-second (1/32) of an inch in dimension.
- (b) The City Engineer may authorize, in writing, the discharge into the sanitary sewer system of such wastes if they are first passed through screens having larger openings than one thirty-second (1/32) of an inch, if the City Engineer is satisfied that such larger openings will provide screening efficiency and effectiveness equal to or better than that provided by the above-specified openings of one thirty-second (1/32) of an inch in dimension.
- (c) Each person who discharges, causes, allows or permits to be discharged into the sanitary sewer system or any part thereof any such wastes shall install and maintain in good operating order, screens as hereinabove specified and appurtenances thereto, including, but not limited to all necessary conveyors and elevators, all in sufficient quantity and of sufficient size and quality to continuously and effectively screen not less than one hundred (100) percent of the peak hydraulic and solids loading imposed on such screens and appurtenances during any processing period.
- (d) No person shall discharge any such screened wastes into the sanitary sewer system or any part thereof, unless and until he or she has obtained a wastewater discharge permit pursuant to this Chapter granting approval to do so. The City Engineer and/or the San Jose Director of Environmental Services may require such person to provide a report prepared by a registered professional engineer which shows, to the satisfaction of the City Engineer and/or the San Jose Director of Environmental Services, that the provisions of this Chapter have been complied with, before the wastewater discharge permit is granted.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.29 - Installation of Grease Control Devices

- (a) Any food service establishment, or other type of business or establishment where grease or other viscous, obstructing, or objectionable materials may be discharged into a public or private sewage main or disposal system, shall have a grease control device and related plumbing of a size and design recommended by the San Jose Director of Environmental Services and approved by the City Engineer.
- (b) Mechanical grease control devices shall meet the specifications and be installed in accordance with their manufacturers' specifications and, in addition, their installation shall provide for the following:
 1. The grease control device shall be so installed and connected that it shall be at all times easily accessible for visual inspection, sampling, cleaning and removal of grease, and other matter from all surfaces.
 2. The grease control device shall be situated on the discharger's premises, except when such a location would be impractical or cause undue hardship on the discharger. The city may issue an encroachment permit to allow the grease control device to be installed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.
 3. Waste discharge from fixtures and equipment in establishments which may contain grease or other materials including, but not limited to, scullery sinks, pot and pan sinks, dishwashers, food waste disposals, soup kettles, and floor drains located in areas where such objectionable materials may exist, may be drained into the sanitary sewer system through the grease control device if approved by the city engineer, provided that toilets, urinals, wash basins, and other fixtures containing fecal material shall not be allowed to flow through the grease control device.
- (c) Grease interceptors shall meet the specifications and be constructed in accordance with the applicable provisions of the Plumbing Code (Chapter 7, Title II), and in addition, shall meet the following requirements:

1. They shall be designed to have a retention time of no less than thirty (30) minutes.
 2. Effluent from the device must flow through an approved sample box.
 3. They shall be installed with at least two (2) manholes for access, situated so that all standpipes can be fully observed, and all internal surfaces can be reached, without confined space entry.
 4. They shall include double-sweep clean-outs on the interceptor inlet and the sample box outlet.
- (d) Grease traps shall meet the specifications and be constructed in accordance with the manufacturer's specifications and the applicable provisions of the Plumbing Code (Chapter 7, Title II) and, in addition, shall meet the following minimum requirements:
1. They shall not have injection ports for chemicals or bacteria.
 2. Appropriate flow restrictors, whether integral or external to the trap, must be installed.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.30 - Maintenance and Operation of Grease Control Devices

- (a) Grease control devices shall be maintained by the owner or operator in efficient operating condition by periodic removal of the accumulated grease. The use of chemicals, bacteria, enzymes, or other additives that have the effect of emulsifying or dissolving grease is prohibited. No accumulated grease shall be introduced into any drainage piping or public or private sewer.
- (b) Grease control devices shall be cleaned on a sufficient frequency to prevent objectionable odors, surcharge of the grease control device, or interference with the operation of the sanitary sewer system. Users with grease control devices shall maintain them in good operating condition at all times.
 1. Grease traps shall be cleaned at least once every thirty (30) days.
 2. Grease interceptors shall be cleaned once every ninety (90) days.
 3. Mechanical grease removal devices must be maintained in a manner and frequency consistent with the manufacturer's specifications and guidance.
 4. Grease control devices shall be cleaned when their last chamber is filled to twenty-five (25) percent or more of capacity with grease or settled solids. Grease interceptors with a sample box shall be cleaned immediately when grease is evident in the sample box.
 5. Grease control devices shall be cleaned by being pumped dry and all accumulated sludge on all surfaces shall be removed by washing down the sides, baffles and tees. No water removed from the device during cleaning shall be returned to the grease control device.
- (c) The City Engineer may grant an exception to the requirements of subsections (b)(1) and (b)(2) where the he/she finds, based on evidence presented by the discharger, that a less frequent cleaning schedule will be sufficient to assure that not more than twenty-five (25) percent of the capacity of the grease control device will be filled with grease or settled solids.
- (d) All dischargers shall implement best management practices in their operations to minimize the discharge of grease to the sanitary sewer system.
- (e) Dischargers shall maintain records on site for a period of at least three (3) years as follows:
 1. Dischargers with an installed grease control device shall maintain records showing that the grease control device has been properly maintained and cleaned as required by subsections (a) and (b); and
 2. Food service establishments shall maintain records showing the following related to all grease hauled off site: date and time was material removed off site, volume removed, hauler name, truck license number, type of grease removed, and final destination of material collected.
- (f) Abandoned grease control devices shall be emptied and filled as required for abandoned septic tanks.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.31 - Installation and Maintenance of Amalgam Separators

- (a) Except as provided in the subsections (b) and (c) below, no person shall discharge, cause, allow or permit any discharge into the sanitary sewer system from a dental vacuum system, unless such discharge has first been processed through an amalgam separator.
- (b) No dental vacuum system shall be installed on or after April 1, 2010 without an amalgam separator. Existing dental vacuum system shall have an amalgam separator installed on or before July 1, 2010. Proof of certification and installation records shall be submitted to the City Engineer and the San Jose Director of Environmental Services within thirty (30) days of installation.
- (c) A dental vacuum system may be operated without an amalgam separator provided that the system is not used in connection with the removal or placement of fillings that contain dental amalgam more than three (3) days per calendar year and the system is used exclusively by the following types of dental practices: (1) orthodontics, (2) periodontics, (3) oral and maxillofacial surgery, (4) radiology, (5) oral pathology or oral medicine, (6) endodontistry and prosthodontistry.
- (d) The owner or operator shall maintain the amalgam separators in accordance with manufacturer recommendations. The owner or operator shall maintain installation, certification, and maintenance

records for a minimum of five (5) years and shall make these available for immediate inspection upon request by the City Engineer or the San Jose Director of Environmental Services or designee during normal business hours.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.32 - Mandatory Wastewater Discharge Permits

No critical user or significant industrial user shall connect, discharge, cause, allow or permit any discharge into the sanitary sewer system except in accordance with a wastewater discharge permit approved by the City Engineer and issued by the San Jose Director of Environmental Services.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.33 - Delinquent Fees

- (a) Any person who fails to file an application for a discharge permit prior to discharge shall be assessed a penalty for delinquent filing as follows:
1. Up to and including thirty (30) days delinquency, the penalty shall be fifty (50) percent of the permit fee.
 2. More than thirty (30) days but less than one (1) year delinquency, the penalty shall be one hundred (100) percent of the permit fee.
 3. More than one (1) year delinquency, the penalty shall be one thousand (1,000) percent of the permit fee.
- (b) Such penalties shall be in addition to any other penalties or fines that may be levied, and in addition to any other remedies that the City may have with respect to the discharge.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.34 - Permit Application

- (a) All persons requiring a wastewater discharge permit shall file a complete application in the form prescribed by the San Jose Director of Environmental Services and shall pay the applicable fees.
- (b) Permit applications are due ninety (90) days prior to commencing discharge to the sanitary sewer system or expiration of existing discharge permit. For new construction, permit applications shall be filed with the San Jose Director of Environmental Services at the time that the application to the City for a building permit for a new building or structure is made.
- (c) All persons discharging wastewaters into the sanitary sewer system for which a wastewater discharge permit has been issued must apply for a new permit prior to making a significant change in the operations affecting their discharge.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.35 - Additional Information May Be Required for Permit Application

- (a) If the City Engineer or the San Jose Director of Environmental Services is not satisfied that the permit application has sufficient information to determine whether the permit should be issued, either the City Engineer or the San Jose Director of Environmental Services may refuse to approve or issue the permit or may request that the applicant submit further information.
- (b) The applicant shall have thirty (30) working days, or such longer period of time as allowed by the City Engineer, after reviewing a request for further information, to complete the application.
- (c) If the returned application is not resubmitted within the specified time period, then a new application for discharge permit must be submitted along with the application fees and any delinquent fees for a new permit.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.36 - Permit Conditions

- (a) Discharge permits shall be expressly subject to all provisions of this Chapter and all other regulations, user charges, discharge limitations, and fees established by the plant, the City, and all applicable local, state and federal laws and regulations.
- (b) The permit may include such terms and conditions as the City Engineer or the San Jose Director of Environmental Services may deem necessary to implement this Chapter, or any other applicable local, state or federal laws and regulations, including but not limited to:
1. Limits on the average and maximum wastewater volume, constituents and characteristics;
 - 2.

- Requirements for installation and maintenance of flow monitoring, inspection and sampling facilities;
3. Specifications and pretreatment requirements for monitoring programs which may include sampling locations, frequency of sampling, number of samples, types and standards for tests and reporting schedule;
 4. Compliance schedules;
 5. Requirements for submission of technical reports or discharge reports;
 6. Requirements for maintaining and retaining plant records relating to wastewater discharge as specified by the City and/or the plant and affording the City and the Plant personnel access thereto;
 7. Requirements for notification to the City and the plant of any new introduction of wastewater constituents or any significant change in the volume or character of the wastewater constituents being introduced into the wastewater stream;
 8. Requirements and plans for protection against accidental discharges, including, but not limited to, berming of chemicals and waste materials. The review and approval of such plans and operating procedures shall not relieve the user from the responsibility of modifying the facility as necessary to provide the protection necessary to meet the requirements of the City Code or other state or federal regulations;
 9. Requirements for notification of accidental discharges;
 10. The installation and maintenance by the discharger, at discharger's expense, of facilities or equipment for intermittent or continuous measurement of the quantity or quality of sewage, industrial waste or other wastes discharged into the sanitary sewer system from such premises;
 11. The installation and maintenance by the discharger, at discharger's expense, of such preliminary treatment facilities as may be required by the plant personnel;
 12. The installation and maintenance by the discharger, at discharger's own expense, of a suitable control manhole in the portion of the side sewer lateral located on private property to facilitate observation, sampling and measurement of the waste. Such manhole, when required, shall be accessible and safely located and shall be constructed in accordance with plans approved by the plant personnel;
 13. The installation and maintenance by the discharger, at discharger's expense, of grease control devices as necessary for the proper handling of liquid wastes containing grease or excessive amounts of any inflammable waste, or other harmful ingredients;
 14. The submission to the San Jose Director of Environmental Services of the plans for any of the above facilities or equipment required to be installed and maintained by the discharger; and/or
 15. Such other terms and conditions as may be necessary to protect the sanitary sewer system and carry out the provisions of this Chapter.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.37 - Permit Duration and Amendment

- (a) Discharge permits shall be issued for a specific duration, not to exceed five (5) years.
- (b) Permits shall be subject to amendment as limitations or requirements for discharge are modified and changed.
- (c) The holder of a discharge permit shall be informed of any proposed amendment to its permit at least thirty (30) days prior to the effective date of the amendment.
- (d) A compliance schedule may be included in an amended permit.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.38 - No Transfer of Wastewater Discharge Permit Allowed

Wastewater discharge permits are issued to a specific user for a specific operation. No user shall assign, transfer, or sell its discharge permit, or use the permit for premises, facilities, or operations not covered by the permit.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.39 - Denial of Permit

The utility engineering section leader may deny a wastewater discharge permit if one or more of the following conditions exist:

- (a) The application is not accompanied by the required fee(s).
- (b) The application contains false or misleading information.

- (c) The issuance of the permit would result in the discharge of industrial wastes of such quantity or strength that the public health or safety, or public or private property is endangered, or that would not comply with the City municipal code requirements.
- (d) The issuance of the permit would cause the city or the Plant to violate any permit conditions, laws, or regulations of the state and/or federal government.
- (e) The applicant has not provided adequate information to establish that its discharge will comply with all requirements of this Chapter and with such other terms and conditions as the City Engineer or the San Jose Director of Environmental Services may deem necessary to include in the discharger's permit.
- (f) The applicant has not provided plans for sufficient protection from accidental discharges to the land, storm drain system or sanitary sewer system.
- (g) There is insufficient remaining allocable treatment capacity for the City of Milpitas as previously defined and more precisely explained in the Fourth Amendment to the Master Agreement for Wastewater Treatment between the Cities of San Jose and the City of Milpitas Providing Allocation of Treatment Capacity dated August 5, 2009.
- (h) Application fees shall not be returned if the permit is denied, unless a permit is not required to discharge the wastewater for which the permit application is made.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.40 - Permit Revocation

- (a) Any user who violates the conditions of the industrial wastewater discharge permit, any provisions of this Chapter or any provisions of applicable state and federal regulations; or who engages in any of the following conduct may be subject to permit revocation or termination:
 1. Failure to factually report the wastewater constituents and characteristics of the discharge;
 2. Failure to report significant changes in operations or wastewater constituents and characteristics;
 3. Refusal of reasonable access to user's premises for the purpose of inspection, monitoring, or verification of records; and/or
 4. Nonpayment of fees and charges.
- (b) If a discharger of wastewater from the premises causes or threatens to cause a condition of contamination, pollution, or nuisance, the discharger may be subject to permit revocation or termination.
- (c) It is unlawful for any person to discharge any material into the sanitary sewer system from any premises for which the permit has been revoked or wastewater service has been suspended or terminated.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.41 - Termination of Service and Permit Revocation

- (a) The City may revoke any wastewater discharge permit and may terminate, or cause to be terminated wastewater service to any premises:
 1. If a discharge of wastewater from the premises causes or threatens to cause a violation of any provision of this Chapter or applicable local, state or federal regulations; or
 2. If a discharge of wastewater from the premises causes or threatens to cause a condition of contamination, pollution, or nuisance.
- (b) If such grounds are found to exist, the permit may be suspended or revoked and service may forthwith be terminated and sanitary and waste disposal facilities forthwith disconnected in City Council's sound discretion.
- (c) The City Engineer shall provide written notice of the permit revocation or service termination, and a statement of the grounds therefore, to the discharger. The notice shall be effective ten (10) calendar days after it is issued to the discharger, unless the City Engineer determines that immediate permit revocation or suspension of service is necessary for the preservation of public health or safety or for the protection of public or private property. If the City Engineer determines that immediate permit revocation or suspension of service is necessary, he/she may act to revoke the permit or suspend service immediately after written notice is delivered to the discharger.
- (d) It shall be unlawful for any person to discharge any material into the sanitary sewer system from any premises for which the permit has been revoked or wastewater service has been suspended or terminated.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.42 - Appeals

- (a) Any permittee or permit applicant may appeal a notice of revocation of a discharge permit, notice of denial of a permit, any term or condition of a permit, amendment of a permit or notice of termination of service to the City Manager.

- (b) Failure of a permittee or applicant to timely request a hearing shall be deemed acceptance of the City's decision and such decision shall be deemed final and effective.
- (c) A request for hearing on a decision to revoke a permit or terminate service shall be filed, in writing, with the City Manager within ten (10) days after the date the notice of revocation or termination of service is served on the permittee. A request for hearing on a decision to revoke a permit or terminate service shall, except in the case of immediate permit revocation or suspension of service for the preservation of public health or safety or for the protection of public or private property, stay the effect of the notice of revocation or termination of service, during the pendency of the appeal.
- (d) A request for hearing on a decision to deny a permit, on the terms or conditions in a permit, on an amendment to a permit, shall be filed, in writing, with the City Manager within thirty (30) days after the date the notice of decision is served on the applicant.
- (e) At the hearing, the applicant shall be given an opportunity to present evidence. The hearing will be conducted informally and technical rules of evidence shall not apply. Any and all evidence which the City Manager deems reliable, relevant, and not unduly repetitious, may be considered.
- (f) The City Manager shall provide written notice of decision on the appeal to the permittee or applicant. The decision of the City Manager shall be deemed final and effective three (3) days after notice of the decision and no appeal to the City Council shall be allowed.
- (g) Filing of a request for hearing shall not entitle any person to discharge in violation of any of the provisions of this code.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.44 - Publication of Significant Industrial Users in Significant Noncompliance

The San Jose Director of Environmental Services is authorized to publish annually, a list of the significant industrial users which, at any time during the previous twelve (12) months, were in significant noncompliance with applicable pretreatment standards and requirements. The term "significant noncompliance" is defined in 40 CFR 403.8.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.45 - Federal Pretreatment Regulations

No industrial user shall discharge, cause, allow or permit a discharge, into the sanitary sewer system in violation of any federal or state regulation regulating discharges by such users, including, but not limited to the Federal Pretreatment Regulations found in Title 40 of the CFR.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.46 - Signature requirements

- (a) Permit applications, discharge reports and any other reports required by the City or the San Jose Director of Environmental Services shall be signed by an executive officer of the business filing the application.
- (b) Such executive officer shall be at least of the level of vice president, general partner, president, or an individual responsible for the overall operation of the facility applying for said permit, or meet federal requirements for NPDES applications as contained in Title 40 of the CFR.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.47 - Record Keeping

All industrial users subject to the reporting requirements of this Chapter shall retain and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this Chapter, and any additional records of information obtained pursuant to monitoring activities undertaken by the industrial user independent of such requirements. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any enforcement action concerning the industrial user, or where the industrial user has been specifically notified of a longer retention period by the city engineer or the San Jose Director of Environmental Services.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.48 - Discharge Reports

- (a) The City Engineer may require that any person connected to or discharging wastewater into the sanitary sewer system file periodic discharge reports or a zero discharge report.

- (b) The periodic discharge reports may be required to include, but need not be limited to nature of process, volume, rates of flow, mass emission rate, hours of operation, number of employees, hauling records, potential for slug discharge or other information which relates to the generation of waste, including wastewater constituents and characteristics in the wastewater discharge and the ability of the discharger to meet applicable discharge limits.
- (c) The zero discharge report shall certify that the zero discharger does not discharge industrial waste to the sanitary sewer system. This report may be required to include, but need not be limited to nature of process, hours of operation, number of employees, hauling records, or other information that relates to the generation of wastes.
- (d) The City Engineer may also require such periodic discharge reports and zero discharge reports to include information concerning the chemical constituents and quantity of chemicals stored on-site, including waste hauling records or other information, which relates to the generation of waste even though they may not normally be discharged.
- (e) In addition to discharge reports, the City Engineer may require dischargers to submit such additional reports as may be necessary to allow the City and the plant to evaluate the discharger's ability to comply with this Chapter, including but not limited to best management practices or self-monitoring reports.
- (f) It is unlawful for any person who has discharged wastewater into the sanitary sewer system to refuse to file any report requested by the City.
- (g) Sampling and analysis shall be performed in accordance with 40 CFR 136 and amendments thereto. Where 40 CFR 136 does not contain sampling or analytical methods for the pollutant in question, or where the San Jose Director of Environmental Services determines that 40 CFR 136 are inappropriate for the pollutant in question, sampling and analysis shall be performed by using analytical methods validated by the director.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.49 - Falsification of Information

- (a) It is unlawful for any person to make any false statement, representation, record, report, plan or other document or to tamper with or render inaccurate or divert flow from any monitoring device or equipment installed or operated pursuant to this Chapter or to any permit issued under this Chapter.
- (b) In addition to any other punishment or remedy provided by law, any such falsification or tampering shall be grounds for revocation of any permit issued under this Chapter.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.50 - Power to Inspect

- (a) The City Engineer shall have the right to access upon all properties for the purpose of inspecting any sewer or storm drain connection, including all discharge connections of roof and surface drains and plumbing fixtures; inspecting, observing, measuring, photographing, sampling, and testing the quality, consistency and characteristics of sewage and industrial wastewaters being discharged into any public sewer or natural outlet; and inspecting and copying any records relating to quantity and quality of wastewater discharges, including but not limited to water usage and effluent discharged, chemical usage, and hazardous waste records.
- (b) The City Engineer may terminate service or revoke the permit of any person who has discharged wastewater to the sanitary sewer system and has unreasonably refused access to the City for inspection of any sewer connection.
- (c) The San Jose Director of Environmental Services may terminate service or revoke the plant wastewater discharge permit of any person who has discharged wastewater to the sanitary sewer system and has unreasonably refused access to the WPCP for inspection of any permitted sewer connection.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.51 - Correction of Violations; Collection of Costs; Injunction

- (a) The City may abate any violation of this Chapter.
- (b) The cost of such abatement may be added to the sewer service charge of the owner or tenant of the property upon which the violation occurred, and the City shall have all available remedies for the collection of such costs as it has for the collection of sewer service charges.

(Ord. No. 208.45, § 2, 12-1-09)

VIII-2-5.52 - Civil Penalties

Any person who intentionally, accidentally or negligently violates any provisions of this Chapter, any provision of any permit issued pursuant to this Chapter, or who intentionally, accidentally, or negligently

discharges waste or wastewater which causes pollution, or violates any effluent limitation, national standard of performance, or national pretreatment or toxicity standard, shall be civilly liable to the City in a sum up to ten thousand dollars (\$10,000) for the first day in which such violation occurs, up to twenty-five thousand dollars (\$25,000) for the second day in which such violation occurs, and fifty thousand dollars (\$50,000) for each additional day.

(Ord. No. 208.45, § 2, 12-1-09)

FOOTNOTE(S):

⁽²³⁾ *Editor's note*— Ord. No. 208.45, § 2, adopted December 1, 2009, amended the Code by repealing former Art. V, §§ VIII-2-5.01—VIII-2-5.65, and added a new Art. V. Former Art. V pertained to similar subject matter, and derived from Ord. No. 208.42, adopted February 5, 2008. ([Back](#))

Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article VI >>

Article VI

- VIII-2-6.01 - Sewer Service Charges
- VIII-2-6.02 - Unmetered Wastes
- VIII-2-6.03 - Authority to Disconnect
- VIII-2-6.04 - Payment for Sewage Services

VIII-2-6.01 - Sewer Service Charges

The charges for sewer service shall be as set forth below and are limited to the actual cost of providing sewer service. The rates for Fiscal Year 2011/12 shall be those set forth in the first column, unless modified by inflation, as provided herein. Rates for all years subsequent to Fiscal Year 2011-12 shall be at or below the proposed maximum rate as determined administratively by City staff after calculating total personnel, overhead, and capital costs incurred to provide the service, and shall be based upon an annual review of utility finances and the sewer revenue program. In no event shall rates exceed the cost of providing the service.

The maximum sewer rates listed below account for current projected treatment costs and inflationary cost increases of 2% for City treatment costs, which is based upon past historical averages and norms. Inflationary costs in excess of 2% or not provided for in the sewer revenue program caused by labor or commodity cost increases recorded in such indices as the Construction Cost Index, published in the Engineering News Record for the San Francisco Bay Area, and utility section and treatment plant financial reviews shall be passed through administratively to the ratepayer. Inflation pass-throughs in excess of the projected maximum sewer rate shall only be implemented with at least 30 days notice to ratepayers.

The following amounts shall be assessed upon each premise maintaining a sewer connection with the City's sewage system.

(a) Residential - Bimonthly for each dwelling unit

Category	FY11/12 Charge	FY12/13 to FY14/15 Maximum Charge
Single Family	\$75.92	\$93.00
Multi-Family	\$51.06	\$52.22
Mobile Home Parks	\$33.36	\$40.87

(b) Commercial, Industrial and Miscellaneous Premises.

- (1) Flat Rate: For non-residential accounts, there shall be a flat rate assessed every billing cycle during which normal billing takes place, regardless of the amount of sewage discharged, in the amount of \$12.82 per bimonthly period to defray billing and sewer system administration costs, effective June 2, 2011. This amount will increase to \$13.72 per bimonthly billing period, effective April 19, 2012. This amount will increase to \$14.68 per bimonthly billing period, effective April 19, 2013. This amount will increase to \$15.72 per bimonthly billing period, effective April 19, 2014.
- (2) Quantity and Strength Charges: For each commercial, industrial, or miscellaneous premises, a charge for each one hundred (100) cubic feet of water used per billing cycle shall be charged as follows:

Category	FY11/12 Rate	FY12/13 to FY14/15 Maximum Rate
Motels, hotels and senior citizen housing developments	\$3.14	\$3.95

General offices, banks, government offices, general merchandise, retail, and shopping centers; building, hardware, and gardening material facilities; amusement centers, and theaters	\$3.23	\$4.33
City of Milpitas	\$2.97	\$3.85
Service stations, repair shops, and car washes	\$3.12	\$3.93
Eating and drinking establishments	\$5.38	\$6.41
Personal services - laundry, barber/beauty shops, cleaners	\$2.85	\$3.63
Jefferson Smurfit Corporation*	\$3.68	\$4.46
T. Marzetti Co.*	\$6.99	\$8.47
Prudential Overall Supply	\$4.06	\$5.33
Loral-Fairchild-Lockheed*	\$2.38	\$3.12
Siemens Water (previously US Filter)	\$3.27	\$4.38
Lucky Pure Water*	\$2.85	\$3.62
DS Water	\$2.71	\$3.75
Milpitas Materials*	\$3.00	\$3.62
Union Pacific Railroad	\$3.52	\$4.69
Headway Technology Corporation	\$3.08	\$4.18
Electrical and electronics design, fabrication, assembly and storage facilities	\$3.20	\$4.27
Metal fabrication, machinery, and tool fabrication facilities	\$4.20	\$5.46
Linear Technology Corporation	\$2.75	\$3.50
Recycled water cooling towers	\$3.20	\$4.27
Schools, colleges and churches	\$4.20	\$5.91
Convalescent hospitals, day care centers and health service facilities	\$3.06	\$3.85
Elmwood Rehabilitation center	\$3.33	\$4.15

*These industrial customers are subject to sewer charge adjustments based on their sewer volumes, as indicated in their Sewer Flow Adjustment Agreements.

- (3) City of San Jose for properties known as North McCarthy Properties: \$492 bimonthly for any discharge up to seventy-five thousand (75,000) gallons per day (Maximum Flow). Excess flow charge of one hundred dollars (\$100.00) for each one thousand (1,000) gallons per day in excess of the Maximum Flow or part thereof.
- (c) Purpose of Charge. The purpose of the sewer service charges stated herein is to defray the City's cost for operation and maintenance of the City's facilities, capital improvement costs, the City's proportionate share of costs at the San Jose-Santa Clara Water Pollution Control Plant and the debt service related thereto, and other costs related to the provision of sewage collection and treatment.
- (d) Billing. After the Ordinance adopting the charges set forth herein goes into effect, customers shall be subject to the sewer service charges set forth in 6.01, in effect as of the beginning date of the bimonthly billing period for which a customer is charged.
- (e) Rate Program. The sewer service charges for the annual periods of Year 1 (June 2, 2011 to April 18, 2012), Year 2 (April 19, 2012 to April 18, 2013), Year 3 (April 19, 2013 to April 18, 2014) and Year 4 (April 19, 2014 to June 30, 2015) shall be calculated administratively, subject to adjustments to reflect the previous year's actual budget balances and annual revenue and expenditures, but the annual rate shall not exceed the maximum allowed in this Section. In the absence of amendment of the rates set forth herein or adoption of a new rate ordinance, the maximum rate shall remain in effect for billing periods and service years subsequent to Fiscal Year 2014-15.

(Ord. No. 208.47, § 2, 5/3/11; Ord. No. 208.44, § 1, 5/5/09)

VIII-2-6.02 - Unmetered Wastes

Where rates are herein specified to be in accordance with the use of water, all such premises shall be separately metered. Where such metering is not provided, or for newly constructed units, the City shall make a reasonable estimate of the volume of water consumed to be used as a basis for sewer service charges.

(Ord. 208, 6/17/80)

VIII-2-6.03 - Authority to Disconnect

In the event of a failure to pay the charges as provided herein for sewage service, the City is authorized to disconnect sewer or water service, or both. In disconnecting such service, the City shall follow the procedures set forth in Section VIII-1-6.10. Users shall be subject to the terms of Section VIII-1-6.10. Service may be restored pursuant to the terms of Section VIII-1-6.11.

(Ord. 208.39 (2), 5/18/04; Ord. 208, 6/17/80)

VIII-2-6.04 - Payment for Sewage Services

All accounts are due and payable within fifteen (15) days of the date of the bill. Accounts shall become delinquent and a late fee equal to five percent of the amount due shall be imposed if a payment has not been received by 5:00 p.m. on the due date.

(Ord. 208.39 (3), 5/18/04; Ord. 208.8, 4/9/83)

Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article VII - Fees >>

Article VII - Fees

- VIII-2-7.01 - Inspection Fees
- Section 7.02 - House Lateral Fee
- Section 7.03 - Disbursements of Short Side Charges
- Section 7.04 - Treatment Plant Fees
- Section 7.04-B -
- Section 7.05 - Connection Fees for Connectors and Installers
- Section 7.06 - Exemption From Connection Fees
- Section 7.07 - Payment of Fees
- Section 7.08 - Expiration of Section 4.01 Permits
- Section 7.09 - Fee For Issuance of New Permit For Expired 4.01 Permit
- Section 7.10 - New Permit Subject to Prevailing Law

VIII-2-7.01 - Inspection Fees

Each connector shall pay a fee to City for the issuing of each permit, for the inspection of each house lateral, house sewer or side sewer, the sum of Five Dollars (\$5.00). Where connector has on file with the City cash deposit for inspection of work, no inspection fee shall be required. In such case, all cost and expenses incurred by City in inspection of the connection shall be made from said deposit.

Section 7.02 - House Lateral Fee

Before the issuance of a permit for the installation of a house lateral, connector shall pay City a fee which shall include the following:

- A. An engineering charge to defray the cost of processing the permit application, which shall be an amount equal to forty cents (\$.40) times one-half the width of the street expressed in feet in which the house lateral is being constructed.
- B. A short side charge shall be collected in all cases where the main or trunk to which connection is being made is located between the center line of the street and the property to be served. Said short side charge shall be an amount equal to four dollars and fifty cents (\$4.50) times the distance in feet between the center line of the street and the main or trunk sewer to which the connection is being made. The purpose of this charge is to equalize connection cost for property on both sides of the street, and it may be disbursed as per Section 7.03 below.

In the event a house lateral is to be connected to a main or trunk sewer located within an easement, the house lateral fee shall be as determined by the City Council.

(Ord. 208 (part), 6/17/80)

Section 7.03 - Disbursements of Short Side Charges

The City Council may disburse to connectors whose house laterals connect to a main or trunk sewer at a point beyond the center line of the street an amount equal to \$4.50 times the distance in feet between the center of the street and the main or trunk sewer to which said connection was made.

(Ord. 208 (part), 6/17/80)

Section 7.04 - Treatment Plant Fees

Before the issuance of a permit to connect to a house lateral, main sewer or trunk sewer Connector shall pay City a fee prepared in accordance with State Water Resources Control Board "Revenue Program Guidelines for Wastewater Agencies" and in accordance with the following schedule:

- A. RESIDENTIAL
 - 1. For each separately owned single family dwelling or for each single family dwelling of two dwellings per structure, a fee of \$880.
 - 2. For each unit of an apartment house, multi-family structure of greater than two units per structure, or for each separately owned single family dwelling of three or more dwellings per structure, a fee of \$690 per unit.
 - 3. For each unit or space of a mobile home park a fee of \$440 per unit or space.
- B. COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL
 - 1. For each commercial, industrial or institutional connection having an estimated consecutive peak five day dry weather sewage discharge less than 5000 gallons per day, a fee based upon the type of use and rate from Table 1 below. The fee shall be computed by multiplying the rate from Table 1 times the estimated peak five day discharge in hundred cubic feet per day or fraction thereof.

Table 1

Type of use	Rate \$/HCF/day
High strength industrial/commercial; Restaurants, eating and drinking, retail food stores.	\$4,200
Low strength industrial/commercial: All others	\$2,600

The peak five day discharge shall be established by the City Engineer. The Connector may submit data on peak discharge for review and use in the final determination by the City.

(Ord. 208.16, 6/4/85)

Section 7.04-B

- 2. For each commercial, industrial or institutional connection having a consecutive peak five day dry weather sewage discharge of 5000 gallons per day or larger, the fee shall be based upon the following:
 - a. \$2,293,957 times each million gallons or fraction thereof of peak five day dry weather sewage discharged, plus
 - b. \$245,251 times each one thousand pounds or fraction thereof per day of biochemical oxygen demand removal capacity required during the peak five day dry weather discharge, plus
 - c. \$134,098 times each one thousand pounds or fraction thereof per day of suspended solids removal capacity required during the peak five day dry weather discharge, plus
 - d. \$1,263,254 times each one thousand pounds or fraction thereof per day of ammonia removal capacity required during the peak five day dry weather discharge.

The removal capacity stated above shall be that capacity required by the particular loading parameter at the San Jose/Santa Clara Water Pollution Control Plant.

The City shall be responsible for estimating the discharge and loading parameters to be used for establishing the Treatment Plant Fee. The Connector may submit sewage discharge and loading data estimated for the development as a basis for the fee, subject to the review and approval of the City.

- 3.
 - a. The Treatment Plant Fee shall be based upon the actual recorded values of flow during the first twelve months of full operation. Upon issuance of a Building Permit (or other authorization for water or sewage service), the Connector shall pay to City an initial sum to be credited to the Treatment Plant Fee due. The initial sum shall be computed based on the City Engineer's estimate of the Treatment Plant Fee.
 - b. Whenever the Engineer's estimate of the Treatment Plant Fee exceeds Fourteen Thousand Dollars (\$14,000.00), the Connector may elect to pay in full or to pay in installments as follows: Fifty percent of the fee shall be paid at the issuance of the Building Permit (or other authorization for water or sewage service), and the

remaining fifty percent in five equal annual installments together with interest. Interest shall be computed at the rate of 10% per annum on the unpaid balance, and accrued interest shall be paid at the same time and in addition to each annual installment.

- c. In the event that the Treatment Plant Fee shall exceed the Engineer's initial estimate, the amount of said excess shall be due and payable within 30 days upon written demand of City. Provided, however, that, upon application by Connector, City may (but shall not be required to), authorize payment of said excess as follows: sixty percent down and the remaining forty percent in four equal annual installments, together with interest at 10% per annum on the unpaid balance, accrued interest being payable at the same time and in addition to each annual installment.
- d. If Connector elects installment payments under Subsection 3.b or 3.c hereunder, Connector shall execute an appropriate contract in a form satisfactory to City Attorney. All installment payments under 3b and 3c shall be subject to the following provision (and any contract or note therefor shall so state): In the event that Connector defaults in the payment of any installment and said installment default is not cured within 30 days of the due date, then, without any notice to Connector, the entire unpaid balance shall become immediately due and payable (together with accrued interest) without regard to maturity date. Without limitation to any remedy authorized by law or by this Chapter, and as an additional remedy, City may seek the recovery of said unpaid balance by suit in a court of competent jurisdiction and, if it prevails, shall be entitled to its costs of court and reasonable attorney fees.
- e. Treatment Plant Fees are based on meter readings. If there is a single meter serving more than one individual, company or other entity (as, for example, in the case of one meter serving a building with a number of tenants, all using water), then the Treatment Plant Fee shall be computed with respect to said single meter. The party in whose name the meter is issued and all parties using said water (e.g., landlord and tenants) are liable for both the treatment Plant Fee and for monthly water and sewage charges. Provided, however, the party in whose name the meter is issued shall be primarily responsible to City for payment of Treatment Plant Fee and for monthly water and sewage charges (and the Treatment Plant Fee will be computed on said party's meter readings, regardless of the amount of water used by any other party in connection with said meter). Joint connectors may apply for separate meters and separate accounts. If separate meters are feasible, separate meters will be authorized at the expense of the connector.
- f. As used in this Chapter, the term "full operation" shall mean one hundred percent utilization of a facility. "One hundred percent utilization" includes, but is not limited to, such factors as: maximum number of employees, maximum production capacity, maximum number of shifts, maximum utilization of equipment.

C. CHANGES IN USE

If, after the final fee is established an industrial, commercial, or institutional user changes their operation resulting in an increased discharge, then the City shall collect additional Treatment Plant Fees based upon the increased discharge and constituent parameters. This change in operation shall be in effect for a period exceeding one year. The new fee shall be established by computing the fee for the new use based upon B1 or B2 above, and then subtracting from that figure the previously paid fee. There shall be no reduction in fee based upon changes in operation or use resulting from a reduction in discharge or constituent parameters.

D. DISPOSITION OF TREATMENT PLANT FEES

All Treatment Plant Fees collected shall be deposited into the Treatment Plant Construction Fund. Any fees collected shall be used to pay capital improvement or capital operating costs at either the San Jose/Santa Clara Water Pollution Control Plant or within the City.

E. EXCLUSION OF THE TRANSIT AREA SPECIFIC PLAN DEVELOPMENT

The provisions of Sections 7.04(A) through 7.04(D) above shall not apply to Connectors located within the boundary of that planning area identified as within the Transit Area Specific Plan for permits to connect a house lateral, main sewer or trunk sewer issued after November 1, 2008. Fees for such excluded connections are set forth in Title VIII, Chapter 4 — "Fees for New Development" of the Milpitas Municipal Code.

(Ord. 208.43(1), 9/16/08; Ord. 208.17, 8/20/85; Ord. 208.12, 3/20/84; Ord. 208.6, 10/20/81)

Section 7.05 - Connection Fees for Connectors and Installers

Prior to connection to any sewer line of City or issuance of building permit (whichever occurs first), or prior to a change in use that results in an increased average daily waste water flow due to the change in use, connectors or developers shall pay to the City a fee for connection to the City's sewerage system as shown below:

- A. \$1,908 per single family dwelling unit.
- B. \$1,406 per dwelling unit at multi-family dwelling developments.
- C. \$8.52 per gallon per day of estimated average daily wastewater discharge for non-residential sites.

Notwithstanding the foregoing, connectors or developers with projects meeting the following criteria shall be subject to the provisions of this section in effect prior to the effective date of the amendments to this section enacted by Ordinance No. 208.38:

- (a) Projects requiring discretionary planning approval with applications that are deemed complete prior to July 15, 2003; and
- (b) Projects that do not require discretionary planning approval that receive building permits prior to July 15, 2003.

(Ord. 238.08 (part), 6/3/03)

D. REIMBURSEMENT

1. **Intent; Definitions, Authority to Classify:** In order to encourage the installation of sewer lines, Milpitas Sanitary District heretofore adopted the procedure of partially reimbursing those persons who install lines (i.e. "installers") for the cost of installation by funds derived from those persons who subsequently connect to the line or develop in the area benefitted by the line. Reimbursement was made pursuant to the provisions of a reimbursement contract, imposing various conditions and limitations on the right to reimbursement.

The holders of said reimbursement contracts are hereafter described as "Class A Installers."

A developer contemplates installing a major trunk sewer line commencing at the City's pump station west of Freeway 17 and ending at Main Street and which will serve a substantial portion of said City. Said installer is hereafter described as "Class B Installer."

It was (and continues to be) contemplated that future sewer lines will be installed serving the remaining portions of City and its sphere of influence. The installers of said lines are collectively referred to as "Class C Installers."

District wished and City now wishes to provide an equitable method of reimbursement for past and future installers so that:

- a. The existing rights of Class A Installers are protected within the terms of their existing reimbursement contracts.
- b. The Class B Installer will share in reimbursement in a manner and amount to encourage its investment in and construction of a relatively large main line which is necessary for both the development of the Class B Installer's subdivision and for the development of the community.
- c. Class C Installers will share in reimbursement in a sufficient amount to encourage the construction of smaller connections (recognizing that if reimbursement to the Class B Installer were to be made strictly in proportion to the cost of the line installed by it, the likely reimbursement to a prospective Class C Installer in any given case might be so small as to discourage the Class C Installer from installing his line).

There are, in addition, certain areas within the City which have been granted a credit for acreage fee; in exchange for other benefits previously conferred upon the District. In the case of developers in LID 2 (as set forth upon the assessment map of said LID 2 filed in the office of the engineer for City) an acreage and front foot credits are due. Said developers will, accordingly, contribute acreage fees of less than \$600 per acre. They will, however, be entitled upon development to apply for reimbursement as Class C Installers subject, however, to the provisions of this Chapter. The developer of Phase 2 of Planned Unit Development 8A is also entitled to a credit against future acreage fees in the amount of \$42,879.37 in exchange for other benefits conferred on the City. No acreage fees will be collected in connection with the development of Phase 2 of said PUD 8A and no reimbursement will be allowed therefor.

The City Council is hereby empowered to:

- d. Determine those geographical areas served by or benefitted by a given sewer line (herein described as "benefit area").
 - e. Cause a map of a benefit area of a given sewer line to be included in the reimbursement contract between the installer of that line and the City.
 - f. Establish categories of installers (as hereinabove set forth) and priorities for reimbursement to them so as to reimburse installers in accordance with the objectives and provisions of this Chapter, the provisions of existing reimbursement contracts and such additional conditions as City shall determine to be just and equitable.
 - g. Enter into contracts with installers to provide for reimbursement in such a manner that installers will be encouraged to construct sewer lines of sufficient capacity to serve other developments besides their own (to the end that the greatest economic, engineering and governmental economy can be achieved and that the unnecessary and expensive duplication of sewer line facilities can be avoided).
 - h. Make provision for the allocation of funds available for reimbursement in geographical areas where two or more sewer lines are located (and where the benefit areas of said respective sewer lines overlap one another).
2. Priorities of Reimbursement
- a. Class A Installers
 - 1. Reimbursement of Funds Derived Solely from Class A Benefit Area
Class A Installers shall receive reimbursement for all acreage fees paid by connectors within the benefit area of said Class A Installer in accordance with existing contracts.
 - 2. Reimbursement If Overlap With Class B Benefit Area
If the benefit area of a Class A Installer shall overlap with the benefit area of the Class B Installer, the Class A Installer shall receive reimbursement for all acreage fees paid by connectors within the benefit area of said Class A Installer (notwithstanding said overlap) and the Class B Installer shall not receive any reimbursement from the area of overlap so long as the Class A Installer's reimbursement contract shall be unexpired. Provided, however, that the Class B Installer shall be entitled to reimbursement of 100% of all acreage fees paid from the Class B benefit area which does not overlap with the Class A or Class C benefit areas.
 - 3. Reimbursement of Class A Installer Subject to Contract
Reimbursement of Class A Installers shall be subject to the covenants and conditions of said Class A Installer's existing reimbursement contract.
 - 4. Assignment of Contract to City
City shall (at the sole discretion and judgment of its Council) be empowered to purchase an assignment of any Class A Installer's reimbursement contract (if the holder of the contract is willing to sell) at an equitable sum. In determining an equitable sum, consideration shall be given to the amount remaining to be reimbursed, the remaining life of the reimbursement contract and the probability of reimbursement. Upon an assignment of said reimbursement contract to City, City shall succeed to all rights of said Class A Installer under said reimbursement contract and this Chapter. The purpose of this authority is to enable City (if its Council wishes) to eliminate City's obligation to the few remaining Class A Installers so as to simplify the administration of the reimbursement program.
 - b. Class B Installers
 - 1. Reimbursement of Funds Derived Solely from Class B Benefit Area
The Class B Installer shall receive reimbursement of all acreage fees paid by connectors within the benefit area of the Class B Installer in accordance with his reimbursement contract.
 - 2. Reimbursement if Overlap with Class C Benefit Area
If the benefit area of the Class B Installer shall overlap with the benefit area of one or more Class C Installer, the Class B Installer shall receive reimbursement of 60% of all acreage fees paid by connectors within the area of overlap between Class B and Class C benefit areas (and the Class C Installers shall receive 40% as hereafter provided). Provided, however, that the Class B Installer shall be entitled to reimbursement of 100% of all

acreage fees paid from the Class B benefit area which does not overlap with the Class A or Class C benefit area.

c. Class C Installer

1. Reimbursement of Funds Derived Solely From Class C Benefit Area

The Class C Installer shall receive reimbursement of all acreage fees paid by connectors in accordance with his reimbursement contract.

2. Reimbursement If Overlap With Class B Benefit Area

If the benefit area of a Class C Installer shall overlap with the benefit area of the Class B Installer, the Class C Installer shall receive reimbursement of forty percent of all acreage fees paid by connectors within the area of overlap between the Class C and the Class B benefit area (and the Class B Installer shall receive 60% as heretofore provided). Provided, however, that the Class C Installer shall be entitled to reimbursement of 100% of all acreage fees paid from the Class C benefit area which does not overlap with any other benefit area.

3. Reimbursement If Overlap With Other Class C Benefit Area

If the benefit area of a Class C Installer shall overlap with the benefit area of one or more other Class C Installers, the respective Class C Installers shall receive reimbursement of all acreage fees paid by connectors within the area or areas of overlap in accordance with the following formula:

Reimbursement Due	× Funds to be Disbursed
<i>Class C Installer</i>	
Total Reimbursement Due	
All Class C Installers	

4. Reimbursement to Class C Installers After December 1, 1978

Class C Installers who execute a reimbursement agreement after December 1, 1978 shall receive reimbursement of all acreage fees paid by connectors on a priority based upon the date of the reimbursement agreement. The first installer shall receive all reimbursement before the second installer.

Provided, however, that any Class C Installer shall be entitled to reimbursement of 100% of all acreage fees paid from its own benefit area which does not overlap with any other benefit area.

d. Fees Derived from Outside of Benefit Area

Acreage fees derived from any area within City which is outside of an established benefit area shall be deposited to the credit of the Sewer Extension Fund.

e. Priorities Subject to Contract and Ordinance

The provisions relating to the sharing of funds available for reimbursement by any given installer (as herein provided) shall be subject to the remaining provisions of this Chapter and to the covenants and conditions of the applicable reimbursement contract.

3. Disposition of Front Frontage Fees

The installer of a sewer line shall be entitled to all front footage fees collected in the City for said line to the extent that said installer has a balance due on a subsisting reimbursement contract. All front footage fees so collected shall be credited against any unpaid balance due on said contract so long as said contract shall be in full force and effect; thereafter, all front footage fees collected by City in connection with said line shall be paid into the Sewer Extension Fund.

4. Reimbursement Contracts

Any reimbursement contract shall include but shall not be limited to the following provisions:

- a. Reimbursement shall be limited to a period of 15 years from the commencement of the contract.
- b. Contracts shall not be subject to voluntary or involuntary assignment, sale or transfer without the express written consent of City.
- c. No interest shall be paid on any funds received by City to be disbursed pursuant to any reimbursement contract.

It is the intent of this Chapter that City shall be empowered to impose any additional provisions as the City Council, in its sole discretion, determines reasonable, necessary and equitable.

5. **Connection Fees From Benefit Area After Reimbursement Contract Has Expired**
Connection fees derived from a given benefit area after the reimbursement contract covering said area has expired or terminated shall be the property of City and shall be used for the maintenance or extension of lines anywhere within the City.
6. **Interest for Acreage and Front Footage Fees**
All interest derived from acreage fees and front footage fees deposited in any bank account pending disbursement shall accrue to the benefit of City.

(Ord. 238.08 (part), 6/3/03)

Section 7.06 - Exemption From Connection Fees

Only that portion of a parcel of land located within the boundaries of a Special Sewer Assessment District and having frontages on and lying within 200 feet of a sewer line constructed under assessment district proceedings shall be exempted from payment of connection fees established by Section 7.05 of this ordinance.

(Ord. 208 (part), 6/17/80)

Section 7.07 - Payment of Fees

- A. Fees due and payable by connectors shall be paid prior to the issuance of a connection permit to Connector.
- B. Fees due and payable by installers shall be paid prior to the approval of the plans and specifications of the sewage system to be installed by Installer, and the City shall have the right to charge and the Installer shall pay the standard engineering fees charged by City for such work as may be done by City.

(Ord. 208 (part), 6/17/80)

Section 7.08 - Expiration of Section 4.01 Permits

Any permit issued under Section 4.01 of this Chapter shall expire and become null and void unless work pursuant thereto shall be commenced within one year of the date of issuance.

(Ord. 208 (part), 6/17/80)

Section 7.09 - Fee For Issuance of New Permit For Expired 4.01 Permit

A new permit may be issued under Section 4.01 of this Chapter for the same authority granted in an expired permit thereunder upon:

- A. Payment of the sum of five dollars (\$5.00) plus
- B. Payment of a sum equal to the difference (if any) in the permit fee at the time of the issuance of the expired permit and at the time of issuance of the new permit.

(Ord. 208 (part), 6/17/80)

Section 7.10 - New Permit Subject to Prevailing Law

Any new permit issued for the same authority granted by an expired permit issued under Section 4.01 shall be subject to (and the permittee shall comply with) all the provisions and conditions of this Chapter enacted and in effect at the time of the issuance of said new permit (including, but not limited to, the provision hereof relating to its expiration after one year) all rules and regulations then applicable and such conditions to the permit as may then be imposed by law.

(Ord. 208 (part), 6/17/80)

Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article VIII - Reimbursement of Excess Costs >>

**Article VIII -
Reimbursement of Excess Costs**

Section 8.01 - Excess Costs

Section 8.02 - Termination of Right to Reimbursement

Section 8.01 - Excess Costs

Excess costs shall equal the cost of the facilities which in the judgment of the City Council are not necessary to serve the property of installer. Excess costs shall be allowed in accordance with the resolution establishing excess costs.

The installer will be required to bear the full cost of any increase in the size of any facility to the extent that such increase in size is required simply and solely to service other lands owned or to be later developed by the same party or owners, or lands under control of the same corporate owners, in the same manner as if all the property were being developed at one and the same time.

(Ord. 208 (part), 6/17/80)

Section 8.02 - Termination of Right to Reimbursement

The installer shall be carried on said Reimbursement Account until one of the following shall first occur:

- A. Reimbursement of an amount equal to reimbursement due.
- B. The lapse of 15 years from date of entry of installer's name on the Reimbursement Account.
- C. Withdrawal of said sewer lines, or of the property sewered thereby, from said City.

Upon occurrence of B above, City shall succeed to the reimbursement credit of the installer, and shall be entitled to all payments due thereof until the total excess cost therefor has been disbursed.

(Ord. 208 (part), 6/17/80)

Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article IX - Adjustments and Exceptions >>

**Article IX -
Adjustments and Exceptions**

Section 9.01 -

Section 9.01

The City Council hereby retains the right to make adjustments and exceptions to the provisions of this Chapter in order to vary or modify the strict application thereof in cases in which there are practical difficulties or unusual hardships in the way of such strict application, or in the interests of justice. Application for any adjustment or exception shall be made to the City Council in writing, or an adjustment or exception may be made by the City Council on its own motion.

(Ord. 208 (part), 6/17/80)

Milpitas, California, Code of Ordinances >> **Title VIII - PUBLIC WORKS** >> **Chapter 2 - MILPITAS SANITARY CODE** >> **Article X - Reimbursement Contracts and Grants in Aid** >>

**Article X -
Reimbursement Contracts and Grants in Aid**

Section 10.01 - Reimbursement Contract

Section 10.02 - Grants in Aid

Section 10.01 - Reimbursement Contract

If for any reason City is unable to advance to installer the amount of net credit due him under Section 7.05C, he may apply to City Council for a Reimbursement Agreement. Any such reimbursement Agreement shall provide for the following:

- A. A termination date no later than 15 years from date of contract by City.
- B. Termination upon repayment to installer or an amount equal to the amount of credit due him as specified by the agreement.
- C. Termination upon withdrawal from the City of sewer lines or property covered by the agreement.
- D. Annual disbursement to installer of his pro-rata share of any fees collected by City under Section 7.05 from property described on the Benefit Area Map which is a part of his Reimbursement Agreement.

(Ord. 208 (part), 6/17/80)

Section 10.02 - Grants in Aid

Where the City Council determines that the best interests of the City shall be served by an extension of trunk or main sewers, it may agree to grant in aid of construction all or any part of the Excess Cost allowed to any installer which is more than the fees provided for by Section 7.05.

- A. Applications for such grants in aid by installers or prospective installers shall be made twice per year prior to July 1 and prior to January 1 and shall be acted upon by the City Council in due process.
- B. The source of monies for such grants-in-aid shall be the Sewer Extension Fund.
- C. Each application for grant-in-aid under this section shall make provision for the following items which shall be evaluated by the City Council prior to allocation of funds:
 - (1) Dollar value of City expense.
 - (2) Number of septic tanks eliminated per dollar of City expense.
 - (3) Recommendation in writing, if any, from Health Department.
 - (4) Number of acres to be served by the proposed extension.
 - (5) Number of acres to be served per dollar of City expense.
 - (6) Number of years required to amortize City's expense by property tax based on a tax rate of \$0.16 applied to property to be served.
 - (7) Potential connection fees per dollar of City expense which will be derived from the proposed extension.
 - (8) Population to be served per dollar of City expense.
 - (9) Tax base per capita to be created by development of installer.
- D. The City Council may approve or reject any or all parts of any application made for grant-in-aid under this section.
- E. No denial of any application shall prejudice a future application of the same or a similar project.
- F. Nothing contained in this section shall be construed as requiring the City to spend all or any part of the monies in the Sewer Extension Fund.

(Ord. 208 (part), 6/17/80)

**Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS
SANITARY CODE >> Article XI - Design Standards >>**

**Article XI -
Design Standards**

Section 11.01 - Design Standards
Section 11.02 -

Section 11.01 - Design Standards

The Standards specified in this section are hereby established as Sanitary Sewer Design Standards for the City. All sewer lines constructed by the City or for dedication to the City shall be designed in accordance with said standards.

(Ord. 208 (part), 6/17/80)

Section 11.02

Said Design Standards are hereby established as follows:

Service capacity of sewer lines and sewer use dependent upon line capacity to sewer will be based on the following criteria:

A. GENERAL DESIGN CRITERIA

1. Vitrified Clay pipe or Acrylonitrile- Butadiene-Styrene pipe
2. Co-efficient of friction "n" = 0.013
3. Minimum velocity = 2 feet per second
4. Maximum velocity = 8 feet per second

B. COLLECTION SYSTEM CAPACITY REQUIRED (Q)

$Q = \text{Peak Factor (PF)} \times \text{Average Daily Flow (SF)} + I/I$ (see Fig. 11.02 for each basin). Peak Factor: $PF = 0.96 \times (\text{SF raised to the power of } -.21)$ (SF = Average Daily Flow in MGD) PF shall not be less than 1.6 in any event
Average Day Flow Generation Factors: Residential: 75 gpd Per Capita. Then multiply by household size for each unit. Single Family—3.5 Multiple Family—3.0 Mobile Home—1.6 e.g. 225 gpd per Multiple Family Unit
Commercial: 2500 gpd Per Net Acre
Industrial: 6000 gpd Per Net Acre

C. CONSTRUCTION STANDARDS

Maximum Distance between manholes: 500 feet
Minimum Cover over pipe: 5 feet.

Design for grid system layout—Cross connect between lines. When not possible, install flushing inlets at dead ends.

Allow a drop around 90° bends in manholes of .2 foot.

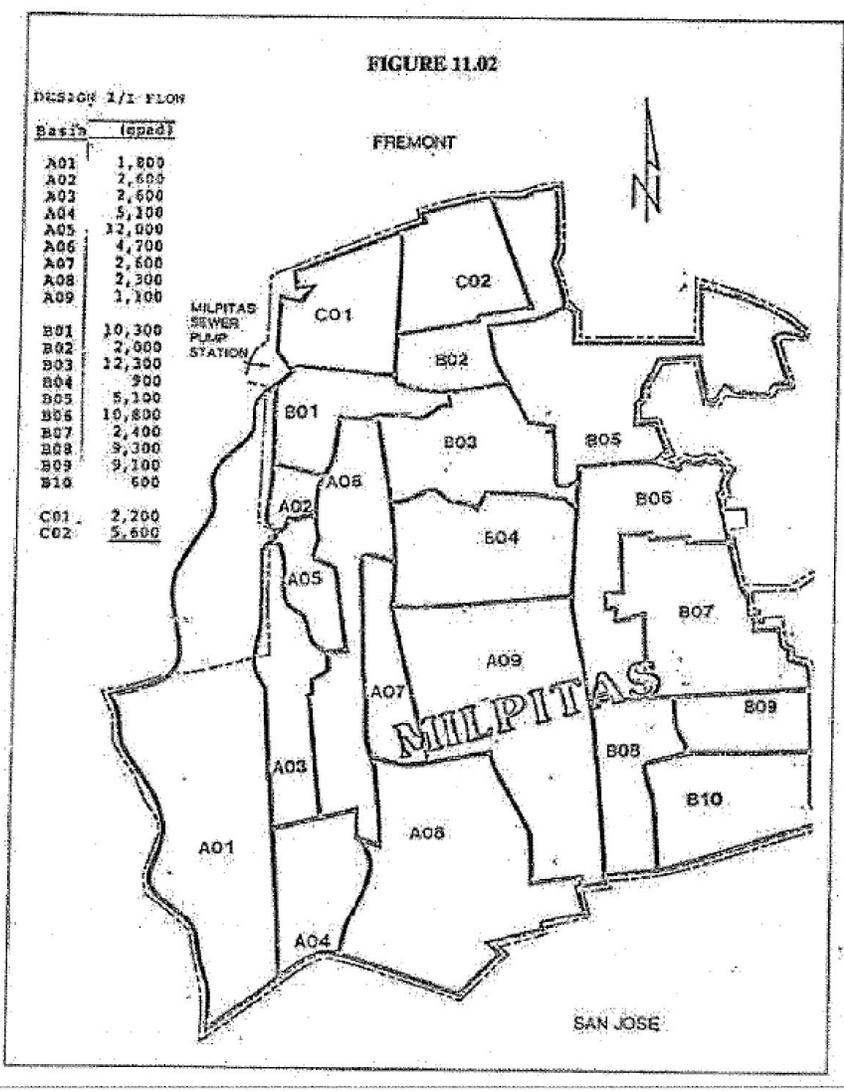
All materials to be in accordance with standards and specifications of City.

All construction to be in accordance with standards and specifications of City.

D. All trunk sewers must contain capacity for immediate service area including service area upstream.

Sewer use districts (in acres) shall be determined by dividing pipe capacity in CFS (using given factors) by peak flow factors (using given factors).

(Ord. 208.18, 5/20/86)



Milpitas, California, Code of Ordinances >> Title VIII - PUBLIC WORKS >> Chapter 2 - MILPITAS SANITARY CODE >> Article XII - Title, Effective Date >>

**Article XII -
Title, Effective Date**

Section 12.01 - Title

Section 12.02 - Effective Date; Urgency Measure

Section 12.03 - Existing Rights, Duties and Contracts

Section 12.04 - Resolutions 503 and 3253

Section 12.05 - Violation Unlawful

Section 12.06 - Termination of Service and Disconnection of Facilities

Section 12.07 - Correction of Violation by City; Imposition of Reasonable Charges Therefor

Section 12.08 - Collection of Sewer Service Charges, Fees and Other Sums

Section 12.09 - Public Nuisance

Section 12.10 - Remedies and Penalties Cumulative

Section 12.01 - Title

This Chapter shall be known as the MILPITAS SANITARY CODE.

(Ord. 208 (part), 6/17/80)

Section 12.02 - Effective Date; Urgency Measure

This Chapter is a reenactment (as revised) of Ordinance No. 3 of the Milpitas Sanitary District as amended and shall take effect upon July 1, 1980 and upon the dissolution of the Milpitas Sanitary District. This Chapter is enacted as an emergency measure to take effect upon the dissolution of said District and is enacted to preserve the public peace, health and safety. The following is a statement of facts constituting the urgency:

The Milpitas Sanitary District is being dissolved effective June 30, 1980 subject to various conditions and the City of Milpitas will succeed to the rights and duties of said District commencing July 1, 1980. The provisions of this Chapter are critically needed to regulate sewage collection and disposal in order to protect the citizenry of Milpitas and adjoining Discharge Areas. There is insufficient time between the enactment date of this Chapter and July 1, 1980 to enact this Chapter as a regular ordinance. It is therefore enacted as an urgency measure.

(Ord. 208 (part), 6/17/80)

Section 12.03 - Existing Rights, Duties and Contracts

All rights and duties arising under contracts entered into by the Milpitas Sanitary District are hereby continued in full force and effect, and the rights of the parties thereto shall be governed by the provisions thereof until said contracts are amended, terminated or discharged by the parties or by operation of said contracts or law. All rights, privileges and duties heretofore established by any ordinance, general order, or resolution of the Milpitas Sanitary District (as amended or superseded) which has not been repealed by action of the Milpitas Sanitary District Board are hereby ratified, approved and confirmed and shall remain in full force and effect until or unless amended or repealed from time to time by ordinance, order or resolution of the Milpitas City Council.

(Ord. 208 (part), 6/17/80)

Section 12.04 - Resolutions 503 and 3253

Attention is directed to the provisions of Resolutions 503 of the Milpitas Sanitary District (as approved by Resolution 3253 of the Milpitas City Council) including but not limited to the provision prohibiting a change in the Sewage Use Fee established by the Sanitary District for the fiscal year 1980-81 during said fiscal year.

(Ord. 208 (part), 6/17/80)

Section 12.05 - Violation Unlawful

It shall be unlawful for any person to violate any provision of this Chapter. Any person violating any provision of this Chapter shall be deemed guilty of an infraction and shall, upon conviction thereof, be punished by the law. Each day that a violation of this Chapter continues shall be considered a separate offense.

(Ord. 208 (part), 6/17/80)

Section 12.06 - Termination of Service and Disconnection of Facilities

Without limitation to the generality of any of the provisions of this Chapter, City shall be empowered to terminate service and disconnect sanitary and waste disposal connections upon a violation of any of the provisions of this Chapter, subject, however, to compliance with the provisions of this Section. Prior to the termination of service and disconnection of sanitary and waste disposal facilities, the City Council shall notify, in writing, the owner and tenant, if any, of the property affected. Said notice shall advise that said City will consider the termination of service and disconnection. Said notice shall state the date of the proposed termination of service and disconnection of service and the reason therefor and the time and date and place that the City Council shall hold a hearing upon said proposed termination and disconnection. Said hearing shall not be less than 10 days subsequent to the giving of notice as herein required. Said notice shall be mailed to the owner at the address shown on the records of the Assessor of Santa Clara County or as known to the City, and a copy shall be delivered to the tenant or posted conspicuously on the property affected. City may (but shall not be required to) give such additional or further notice as in the discretion of the City Council is convenient or desirable. Upon the conclusion of the hearing, the City Council shall adopt a resolution determining whether there is a violation of this Chapter then existing City Council. If there is a violation of this Chapter then existing, the resolution shall determine that service be terminated and that the sanitary and waste disposal facilities be disconnected. Service shall forthwith be terminated and sanitary and waste disposal facilities forthwith disconnected. A copy of said resolution shall be mailed to the owner at the address shown on the records of the Assessor of the County as known to the City, and a copy shall be delivered to the tenant or posted conspicuously on the property; provided, however, that the service of said copy of the resolution shall not be a condition precedent or subsequent to the termination or disconnection of service. The City Council may reinstate service and reconnect sanitary and waste disposal facilities upon petition for reinstatement in accordance with the procedures set forth for the reinstatement of a permit and service pursuant to the provisions of Section 5.53 of this Chapter and of other applicable provisions of this Chapter.

(Ord. 208 (part), 6/17/80)

Section 12.07 - Correction of Violation by City: Imposition of Reasonable Charges Therefor

Without limitation to the generality of any provision of this Chapter, and without imposing any obligation whatever upon City to do so, City shall be empowered to correct any violation of the provisions of this Chapter and to impose the cost of said corrections upon the person or persons violating said Chapter or upon the owner or tenant of property upon which said violations exist. The cost of said correction shall constitute a debt to the City and a sewer service charge within the meaning of Article VI of this Chapter. City shall have such remedies for the collection of said costs as it has for the collection of sewer service charges under the provisions of this Chapter.

(Ord. 208 (part), 6/17/80)

Section 12.08 - Collection of Sewer Service Charges, Fees and Other Sums

Without limitation to the generality of any of the provisions of this Chapter and in addition to such remedies as are herein provided for the collection thereof, City shall be empowered to institute legal proceedings in any Court of competent jurisdiction for the collection of sewer service charges pursuant to the provisions of Article VI of this Chapter, for the collection of fees pursuant to the provisions of Article VII of this Chapter, for the collection of reasonable charges under the provisions of Article V of this Chapter, for the collection of correction charges under Article XII of this Chapter, and without limitation, for the collection of any other fee or charge imposed by any provision of this Chapter or by any rule or regulation issued pursuant thereto.

(Ord. 208 (part), 6/17/80)

Section 12.09 - Public Nuisance

The violation of this Chapter shall be and the same is hereby declared to be a public nuisance and the attorney for City shall, upon order of the City, immediately commence actions or proceedings for the abatement or removal or enjoinder thereof in the manner provided by law.

(Ord. 208 (part), 6/17/80)

Section 12.10 - Remedies and Penalties Cumulative

See Section I-1-4.11.

(Ord. 208 (part), 6/17/80)

Milpitas, California, Code of Ordinances >> **Title VIII - PUBLIC WORKS** >> **Chapter 2 - MILPITAS SANITARY CODE** >> **Article XIII - Responsibility for Maintenance** >>

**Article XIII -
Responsibility for Maintenance**

Section 13.01 - Maintenance by City

Section 13.02 - Maintenance by User

Section 13.01 - Maintenance by City

Trunk sewers and main sewers shall be maintained by the City when located in City streets or easements.

(Ord. 208.32 (part), 10/7/97; Ord. 208 (part), 6/17/80)

Section 13.02 - Maintenance by User

The User shall be responsible for clearing all stoppages and maintaining flow in the side sewer, consisting of the house lateral and house sewer, in accordance with the following provisions:

- A. Stoppages or other maintenance and repairs required in the house sewer shall be the responsibility of the User.
- B. The User shall be responsible for clearing stoppages in the entire length of the house lateral. If stoppage cannot be removed by the User or plumber hired by the User, by rodding or other routine cleaning methods, the City will attempt to clear the stoppage through the street cleanout, if one exists. If a street cleanout does not exist, the User shall be responsible for installing one. If the stoppage is found to be caused by grease, rags or other foreign matter contributed by the User, or if in fact it is found that no stoppage exists, the user shall pay the City the costs incurred. If more than one User is served by a single side sewer, the cost will be divided equally among the Users. If the stoppage is found to be caused by a broken pipe or other structural failure, necessary repairs will be made by the City at no charge to the User.

(Ord. 208.32 (part), 10/7/97; Ord. 208 (part), 6/17/80)

Appendix E

System Map

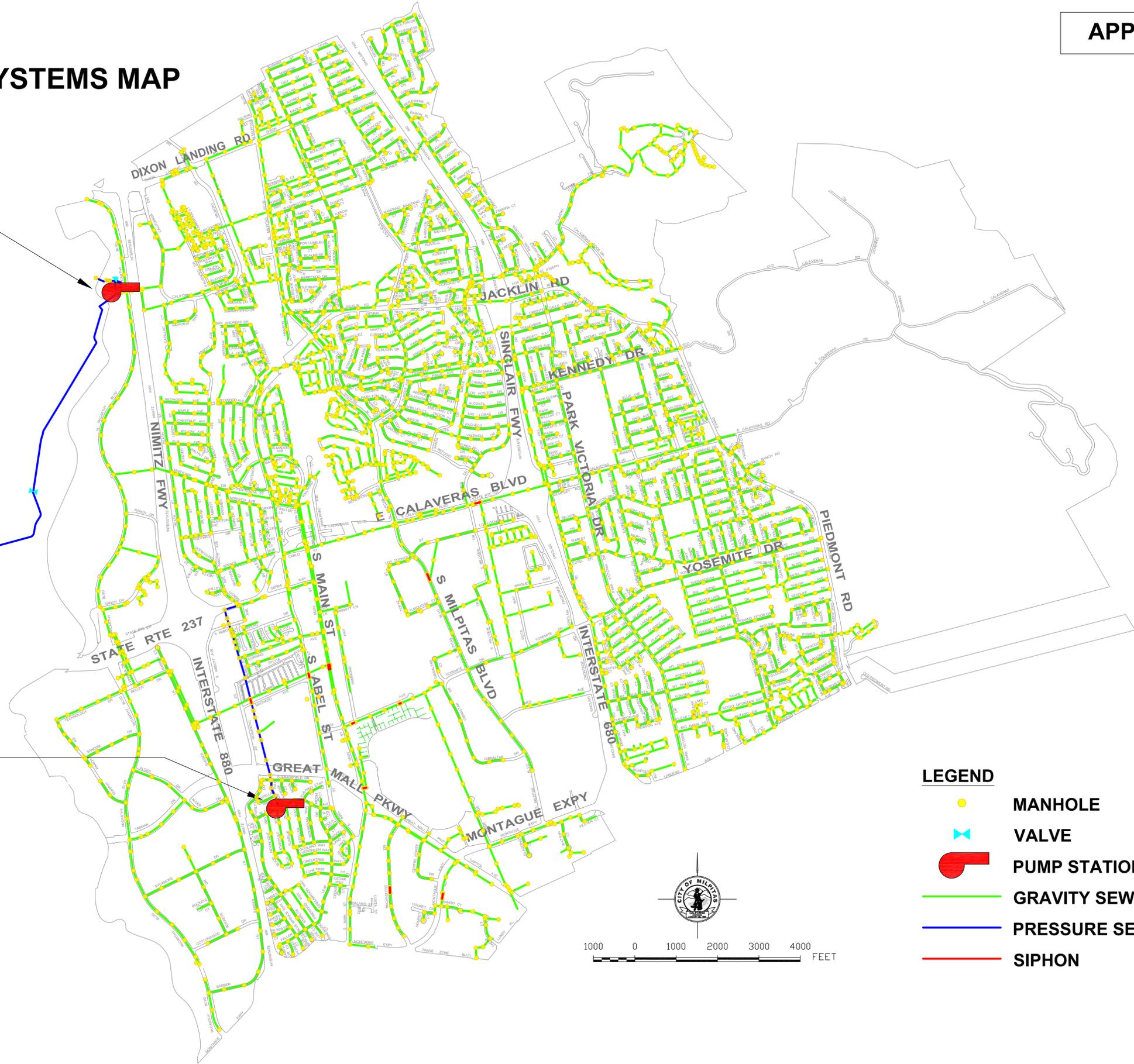
**CITY OF MILPITAS
SANITARY SEWER SYSTEMS MAP
July 2014**

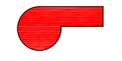
**MAIN SEWAGE PUMP
STATION (AVERAGE
FLOW RATE: 7-12 MILLION
GALLONS PER DAY)**

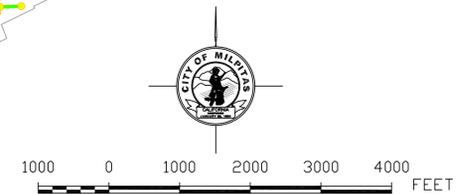
**S.J. / S.C. WATER
POLLUTION CONTROL
PLANT (WPCP)**



**VENUS SEWAGE PUMP
STATION (AVERAGE
FLOW RATE: 1 MILLION
GALLONS PER DAY)**



- LEGEND**
-  **MANHOLE**
 -  **VALVE**
 -  **PUMP STATION**
 -  **GRAVITY SEWER PIPE**
 -  **PRESSURE SEWER PIPE**
 -  **SIPHON**



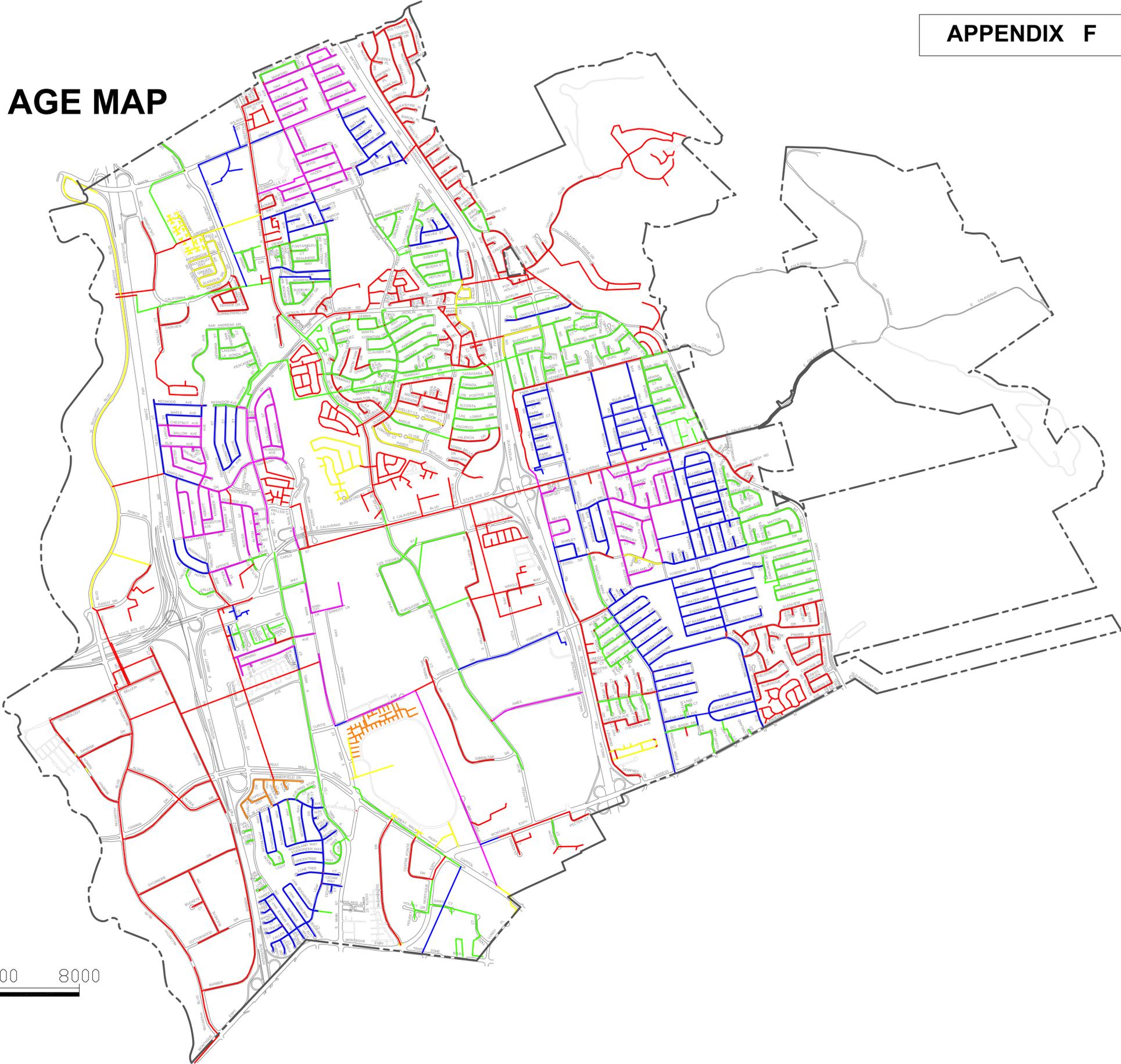
Appendix F

Pipe Ages Map

CITY OF MILPITAS SANITARY SEWER PIPE AGE MAP July 2014

LEGEND:

- CITY BOUNDARY
- 1950s
- 1960s
- 1970s
- 1980s
- 1990s
- 2000s



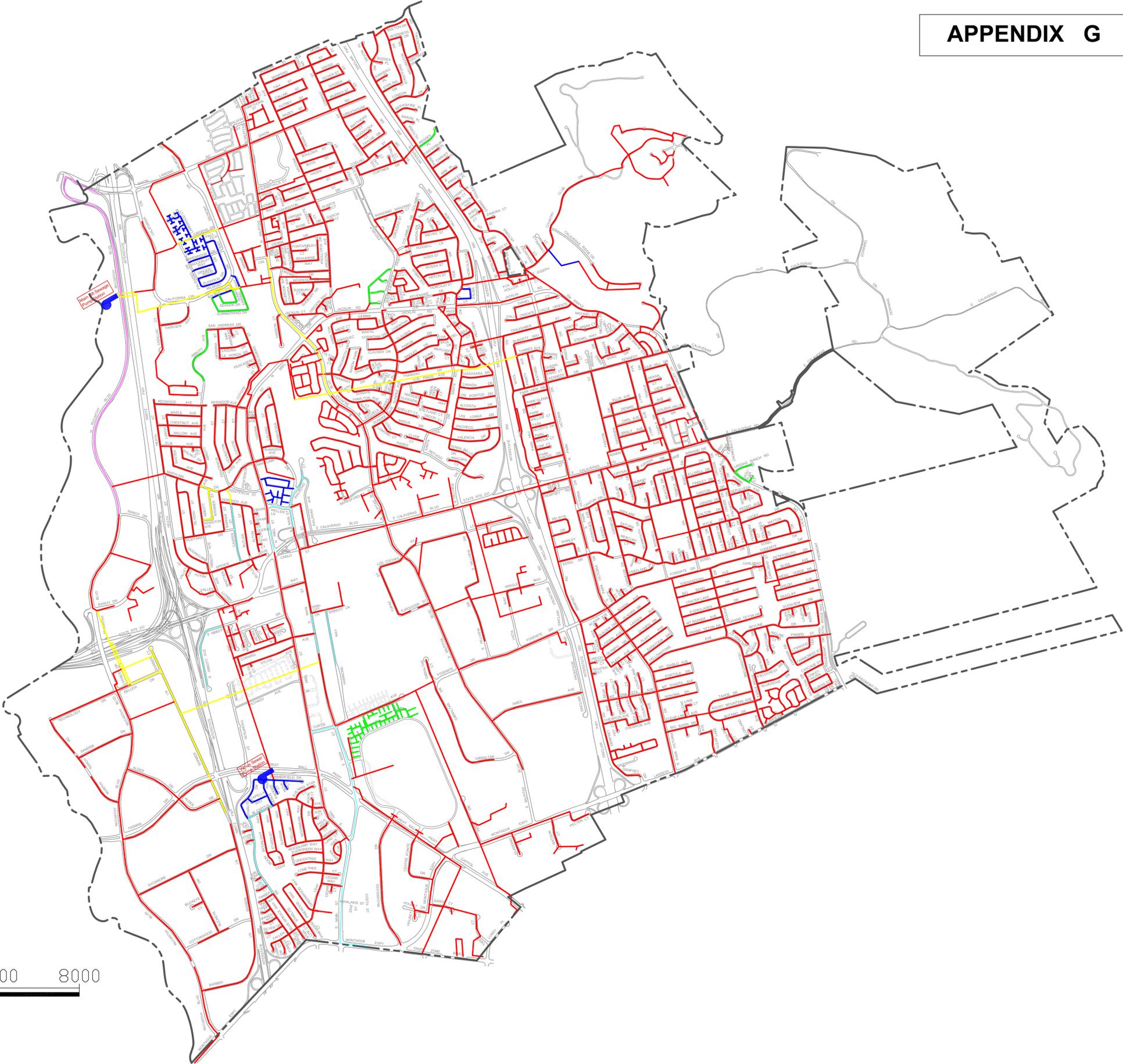
Appendix G

Pipe Materials Map

CITY OF MILPITAS SANITARY SEWER PIPE MATERIAL MAP July 2014

LEGEND:

-  CITY BOUNDARY
-  ACRYLONITRILE BUTADIENE STYRENE PIPE
-  POLYVINLYL CHLORIDE PIPE
-  REINFORCED CONCRETE PIPE
-  REINFORCED CONCRETE PIPE WITH PVC LINING
-  VITRIFIED CLAY PIPE
-  SEWER PUMP STATION

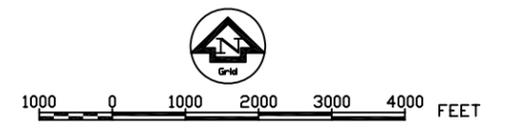
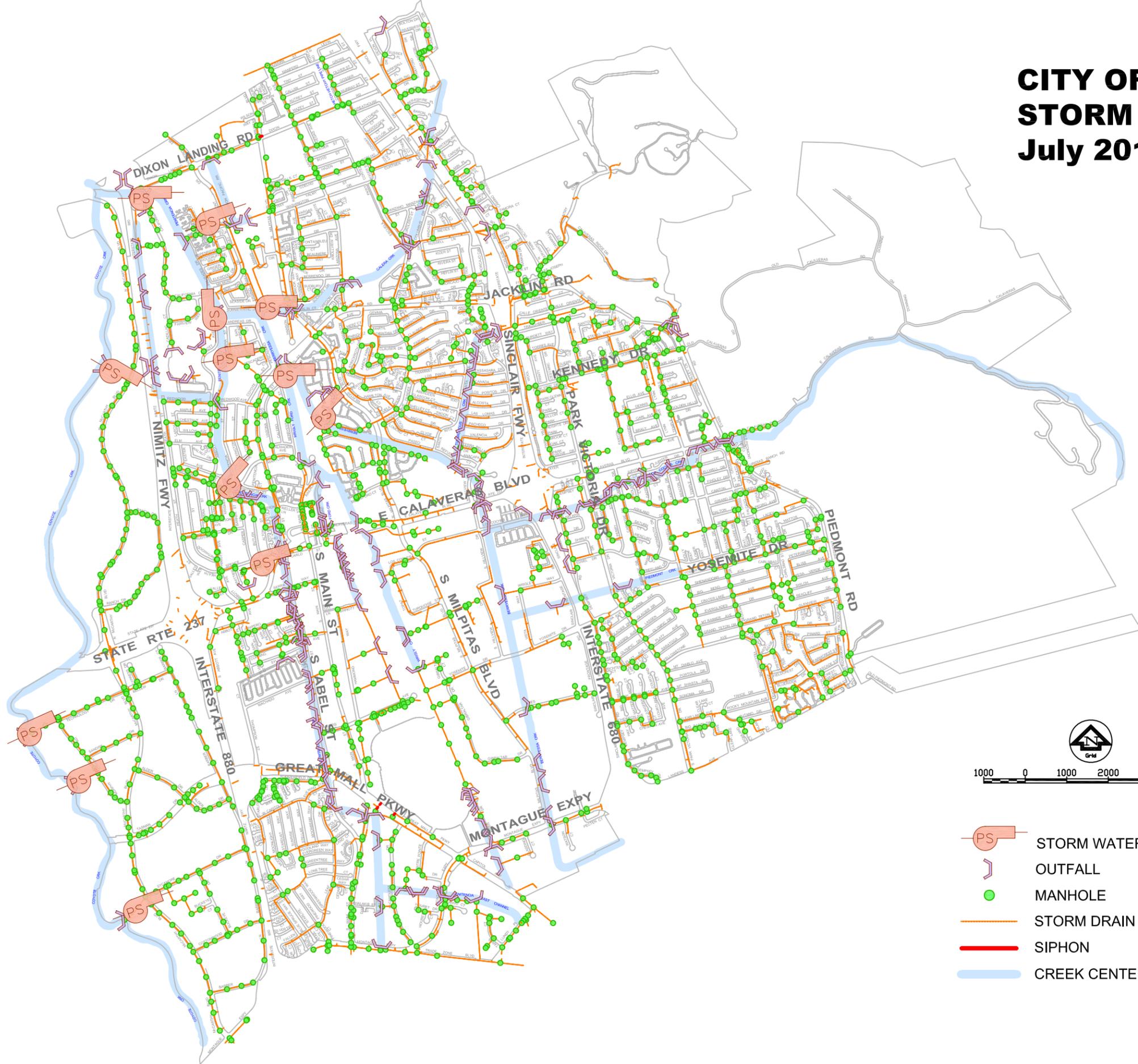


2000 0 2000 4000 6000 8000

Appendix H

Storm Drain Facilities Map

CITY OF MILPITAS STORM DRAIN SYSTEMS MAP July 2014



-  STORM WATER PUMP STATION
-  OUTFALL
-  MANHOLE
-  STORM DRAIN PIPELINE
-  SIPHON
-  CREEK CENTERLINE

Appendix I

Capital Improvement Program

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM
SEWER IMPROVEMENT PROJECTS SUMMARY

SUMMARY OF COSTS

PG. NO. PROJECT		TOTAL COST	PRIOR YEARS	2013-14	2014-15	2015-16	2016-17	2017-18
109	6118 San Jose/Santa Clara Regional Waste Wate	25,000,000	0	7,500,000	5,000,000	5,000,000	5,000,000	2,500,000
110	New BART Project - Sewer Improvements	350,000	0	0	0	250,000	100,000	0
111	New Minor Sewer Projects 2015	100,000	0	0	100,000	0	0	0
112	New Minor Sewer Projects 2018	50,000	0	0	0	0	0	50,000
113	New Sanitary Sewer Overflow Improvements	100,000	0	0	0	0	0	100,000
114	New Sewer Main Replacement Study 2018	115,000	0	0	0	0	0	115,000
115	New Sewer System Replacement 15-16	1,000,000	0	0	0	1,000,000	0	0
116	New Sewer System Replacement 16-17	2,500,000	0	0	0	0	2,500,000	0
117	New Sewer System Replacement 17-18	1,000,000	0	0	0	0	0	1,000,000
118	New Supervisory Control & Data Acquisition (S	250,000	0	0	0	0	0	250,000
119	New Venus Pump Station Rehabilitation	50,000	0	0	0	0	0	50,000
	Defunding Subtotal							
	Funding Subtotal			7,500,000				
	TOTAL COST	\$30,515,000	0	\$7,500,000	\$5,100,000	\$6,250,000	\$7,600,000	\$4,065,000

SUMMARY OF AVAILABLE FINANCING

Other	2,500,000	2,500,000	2,500,000	2,500,000	0
Sewer Fund	5,000,000	2,600,000	2,750,000	2,600,000	3,065,000
Sewer Infrastructure Fund	0	0	1,000,000	2,500,000	1,000,000
TOTAL AVAILABLE	\$7,500,000	\$5,100,000	\$6,250,000	\$7,600,000	\$4,065,000

NOTES

(a) "Other" are identified on detailed project sheets.

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

SUMMARY OF PROJECT FUNDING SOURCES

Sewer Improvement

			2013-14			
			Sewer Fund	Sewer Infrastructure Fund	Other	
PG	PROJECT					
109	<i>6118</i>	<i>San Jose/Santa Clara Regional Waste Water Facility</i>	5,000,000	0	2,500,000	0
110	New	BART Project - Sewer Improvements	0	0	0	0
111	New	Minor Sewer Projects 2015	0	0	0	0
112	New	<i>Minor Sewer Projects 2018</i>	0	0	0	0
113	New	<i>Sanitary Sewer Overflow Improvements</i>	0	0	0	0
114	New	<i>Sewer Main Replacement Study 2018</i>	0	0	0	0
115	New	Sewer System Replacement 15-16	0	0	0	0
116	New	Sewer System Replacement 16-17	0	0	0	0
117	New	<i>Sewer System Replacement 17-18</i>	0	0	0	0
118	New	<i>Supervisory Control & Data Acquisition (SCADA)</i>	0	0	0	0
119	New	<i>Venus Pump Station Rehabilitation</i>	0	0	0	0
Total Defunding by Funding Source			(0)	(0)	(0)	(0)
Total Funding by Funding Source			5,000,000	0	2,500,000	0
Subtotal by Funding Source			5,000,000	0	2,500,000	0
Subtotal by Year			7,500,000			

NOTES

(none)

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

SUMMARY OF PROJECT FUNDING SOURCES

Sewer Improvement

PG	PROJECT	2014-15			
		Sewer Fund	Sewer Infrastructure Fund	Other	
109	6118 San Jose/Santa Clara Regional Waste Water Facility	2,500,000	0	2,500,000	0
110	New BART Project - Sewer Improvements	0	0	0	0
111	New Minor Sewer Projects 2015	100,000	0	0	0
112	New Minor Sewer Projects 2018	0	0	0	0
113	New Sanitary Sewer Overflow Improvements	0	0	0	0
114	New Sewer Main Replacement Study 2018	0	0	0	0
115	New Sewer System Replacement 15-16	0	0	0	0
116	New Sewer System Replacement 16-17	0	0	0	0
117	New Sewer System Replacement 17-18	0	0	0	0
118	New Supervisory Control & Data Acquisition (SCADA)	0	0	0	0
119	New Venus Pump Station Rehabilitation	0	0	0	0
Total Defunding by Funding Source		0	0	0	0
Total Funding by Funding Source		2,600,000	0	2,500,000	0
Subtotal by Funding Source		2,600,000	0	2,500,000	0
Subtotal by Year		5,100,000			

NOTES

(none)

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

SUMMARY OF PROJECT FUNDING SOURCES

Sewer Improvement

			2015-16			
PG	PROJECT		Sewer Fund	Sewer Infrastructure Fund	Other	
109	6118	<i>San Jose/Santa Clara Regional Waste Water Facility</i>	2,500,000	0	2,500,000	0
110	New	BART Project - Sewer Improvements	250,000	0	0	0
111	New	Minor Sewer Projects 2015	0	0	0	0
112	New	<i>Minor Sewer Projects 2018</i>	0	0	0	0
113	New	<i>Sanitary Sewer Overflow Improvements</i>	0	0	0	0
114	New	<i>Sewer Main Replacement Study 2018</i>	0	0	0	0
115	New	Sewer System Replacement 15-16	0	1,000,000	0	0
116	New	Sewer System Replacement 16-17	0	0	0	0
117	New	<i>Sewer System Replacement 17-18</i>	0	0	0	0
118	New	<i>Supervisory Control & Data Acquisition (SCADA)</i>	0	0	0	0
119	New	<i>Venus Pump Station Rehabilitation</i>	0	0	0	0
Total Defunding by Funding Source			0	0	0	0
Total Funding by Funding Source			2,750,000	1,000,000	2,500,000	0
Subtotal by Funding Source			2,750,000	1,000,000	2,500,000	0
Subtotal by Year			6,250,000			

NOTES

(none)

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

SUMMARY OF PROJECT FUNDING SOURCES

Sewer Improvement

PG	PROJECT	2016-17			
		Sewer Fund	Sewer Infrastructure Fund	Other	
109	<i>6118 San Jose/Santa Clara Regional Waste Water Facility</i>	2,500,000	0	2,500,000	0
110	New BART Project - Sewer Improvements	100,000	0	0	0
111	New Minor Sewer Projects 2015	0	0	0	0
112	New <i>Minor Sewer Projects 2018</i>	0	0	0	0
113	New <i>Sanitary Sewer Overflow Improvements</i>	0	0	0	0
114	New <i>Sewer Main Replacement Study 2018</i>	0	0	0	0
115	New Sewer System Replacement 15-16	0	0	0	0
116	New Sewer System Replacement 16-17	0	2,500,000	0	0
117	New <i>Sewer System Replacement 17-18</i>	0	0	0	0
118	New <i>Supervisory Control & Data Acquisition (SCADA)</i>	0	0	0	0
119	New <i>Venus Pump Station Rehabilitation</i>	0	0	0	0
Total Defunding by Funding Source		0	0	0	0
Total Funding by Funding Source		2,600,000	2,500,000	2,500,000	0
Subtotal by Funding Source		2,600,000	2,500,000	2,500,000	0
Subtotal by Year		7,600,000			

NOTES

(none)

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

SUMMARY OF PROJECT FUNDING SOURCES

Sewer Improvement

			2017-18			
PG	PROJECT		Sewer Fund	Sewer Infrastructure Fund	Other	
109	6118	<i>San Jose/Santa Clara Regional Waste Water Facility</i>	2,500,000	0	0	0
110	New	BART Project - Sewer Improvements	0	0	0	0
111	New	Minor Sewer Projects 2015	0	0	0	0
112	New	<i>Minor Sewer Projects 2018</i>	50,000	0	0	0
113	New	<i>Sanitary Sewer Overflow Improvements</i>	100,000	0	0	0
114	New	<i>Sewer Main Replacement Study 2018</i>	115,000	0	0	0
115	New	Sewer System Replacement 15-16	0	0	0	0
116	New	Sewer System Replacement 16-17	0	0	0	0
117	New	<i>Sewer System Replacement 17-18</i>	0	1,000,000	0	0
118	New	<i>Supervisory Control & Data Acquisition (SCADA)</i>	250,000	0	0	0
119	New	<i>Venus Pump Station Rehabilitation</i>	50,000	0	0	0
Total Defunding by Funding Source			0	0	0	0
Total Funding by Funding Source			3,065,000	1,000,000	0	0
Subtotal by Funding Source			3,065,000	1,000,000	0	0
Subtotal by Year			4,065,000			

NOTES

(none)

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

Category	Project	Estimate Level
Sewer Improvement	6118 San Jose/Santa Clara Regional Waste Water Facility	1

CONTACT: Marilyn Nickel [3347]

PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

The City of Milpitas pumps our sewage to the San Jose/Santa Clara Regional Waste Water Facility for waste water treatment before it can be discharged into the San Francisco Bay. This project will fund Milpitas's share of the facilities rehabilitation costs. The facility was originally constructed in 1956 and is reaching the end of its useful life and is in need of a complete overhaul. The City of San Jose which operates the facility is undergoing a large rehabilitation project to completely overhaul the facility over the next 30 years. The City of Milpitas uses approximately 7% of the facility and will be responsible for 7% of the estimated \$2 billion or \$140 million in improvements that will be made over the next 30 years.

COMMENTS:

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Improvements	0	7,500,000	5,000,000	5,000,000	5,000,000	2,500,000	25,000,000
Totals	0	7,500,000	5,000,000	5,000,000	5,000,000	2,500,000	25,000,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	5,000,000	2,500,000	2,500,000	2,500,000	2,500,000	15,000,000
Sewer Treatment Fund	0	2,500,000	2,500,000	2,500,000	2,500,000	0	10,000,000
Totals	0	7,500,000	5,000,000	5,000,000	5,000,000	2,500,000	25,000,000

FINANCE NOTES

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

Category	Project	Estimate Level
Sewer Improvement	New BART Project - Sewer Improvements	

CONTACT: Jeff Moneda (3345)

PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

The BART project will cause the relocation of existing sewer pipelines utilities along the BART corridor at its own expense. The City has identified sewer pipelines improvements which should be completed as part of the BART utility relocation effort. These include rerouting and upsizing based on the City's Sewer Master Plan. These additional sewer system improvements are outside of the BART project scope and are to be paid for by the City.

COMMENTS:

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	0	0	0	0
Administration	0	0	0	0	0	0	0
Surveying	0	0	0	0	0	0	0
Inspection	0	0	0	0	0	0	0
Improvements	0	0	0	250,000	100,000	0	350,000
Totals	0	0	0	250,000	100,000	0	350,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	0	0	250,000	100,000	0	350,000
Totals	0	0	0	250,000	100,000	0	350,000

FINANCE NOTES

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

Category	Project	Estimate Level
Sewer Improvement	New Minor Sewer Projects 2015	1

CONTACT: Steve Erickson [3301]

PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

This project involves the ongoing analysis, engineering and implementation of various minor modifications and improvements to the existing sewer system which arise during the year

COMMENTS:

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Administration	0	0	10,000	0	0	0	10,000
Surveying	0	0	3,000	0	0	0	3,000
Inspection	0	0	3,000	0	0	0	3,000
Improvements	0	0	84,000	0	0	0	84,000
Totals	0	0	100,000	0	0	0	100,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	0	100,000	0	0	0	100,000
Totals	0	0	100,000	0	0	0	100,000

FINANCE NOTES

**City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM**

Category	Project	Estimate Level
Sewer Improvement	New Minor Sewer Projects 2018	1

CONTACT: Steve Erickson [3301]

PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

This project involves the ongoing analysis, engineering and implementation of various minor modifications and improvements to the existing sewer system which arise during the year.

COMMENTS:

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	0	0	10,000	10,000
Administration	0	0	0	0	0	5,000	5,000
Surveying	0	0	0	0	0	5,000	5,000
Improvements	0	0	0	0	0	30,000	30,000
Totals	0	0	0	0	0	50,000	50,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	0	0	0	0	50,000	50,000
Totals	0	0	0	0	0	50,000	50,000

FINANCE NOTES

**City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM**

Category	Project	Estimate Level
Sewer Improvement	New Sanitary Sewer Overflow Improvements	1

CONTACT: Marilyn Nickel [3347]

PRIORITY: Mandatory or Committed Projects

DESCRIPTION

This project includes multiple measures to reduce sewer system overflows. A pilot program for "smart" manhole covers would be implemented. These manhole covers contain a sewer manhole flow level sensor that would transmit alarms prior to overflows. In addition, sewer backflow devices would be installed at selected sites.

COMMENTS:

State regulations require sewer system agencies to reduce sewer system overflows.

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Administration	0	0	0	0	0	10,000	10,000
Improvements	0	0	0	0	0	90,000	90,000
Totals	0	0	0	0	0	100,000	100,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	0	0	0	0	100,000	100,000
Totals	0	0	0	0	0	100,000	100,000

FINANCE NOTES

**City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM**

Category	Project	Estimate Level
Sewer Improvement	New Sewer Main Replacement Study 2018	1

CONTACT: Marilyn Nickel [3347]

PRIORITY: Studies and Analyses

DESCRIPTION

This project involves field evaluation of the remaining useful life of the city's sewer lines including but not limited to: McCarthy/Technology/Cypress and Barber/Bellew.

COMMENTS:

The 2002 Depreciation Study has estimated the remaining life of the existing sewer system infrastructure. This work is to field verify the projects identified with useful life ending by 2017, confirm the need and scope of work, and prioritize these projects. It may also include pipelines requiring significant attention even if they are not at the end of their useful life.

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	0	0	105,000	105,000
Surveying	0	0	0	0	0	10,000	10,000
Totals	0	0	0	0	0	115,000	115,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	0	0	0	0	115,000	115,000
Totals	0	0	0	0	0	115,000	115,000

FINANCE NOTES

**City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM**

Category	Project		Estimate Level
Sewer Improvement	New	Sewer System Replacement 15-16	1

CONTACT: Steve Erickson [3301]

PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, forcemain's, and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

COMMENTS:

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	150,000	0	0	150,000
Administration	0	0	0	45,000	0	0	45,000
Surveying	0	0	0	20,000	0	0	20,000
Inspection	0	0	0	100,000	0	0	100,000
Improvements	0	0	0	685,000	0	0	685,000
Totals	0	0	0	1,000,000	0	0	1,000,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Infrastructure Fund	0	0	0	1,000,000	0	0	1,000,000
Totals	0	0	0	1,000,000	0	0	1,000,000

FINANCE NOTES

See following year's Sewer System Replacement for future year funding

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

Category	Project		Estimate Level
Sewer Improvement	New	Sewer System Replacement 16-17	1

CONTACT: Steve Erickson [3301]

PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, foremain and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

COMMENTS:

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	0	200,000	0	200,000
Administration	0	0	0	0	50,000	0	50,000
Surveying	0	0	0	0	50,000	0	50,000
Inspection	0	0	0	0	100,000	0	100,000
Improvements	0	0	0	0	2,100,000	0	2,100,000
Totals	0	0	0	0	2,500,000	0	2,500,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Infrastructure Fund	0	0	0	0	2,500,000	0	2,500,000
Totals	0	0	0	0	2,500,000	0	2,500,000

FINANCE NOTES

See following year's Sewer System Replacement for future year funding

City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM

Category	Project		Estimate Level
Sewer Improvement	New	Sewer System Replacement 17-18	1

CONTACT: Steve Erickson [3301]

PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

This project provides for the replacement of the highest priority facilities, including upgrades to the Sewer Pump Stations, forcemains and seismic retrofit work. The replacement prioritization is based on several factors including age, type of pipe material, soil conditions and physical evaluation based on video camera observations.

COMMENTS:

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	0	0	150,000	150,000
Administration	0	0	0	0	0	45,000	45,000
Surveying	0	0	0	0	0	20,000	20,000
Inspection	0	0	0	0	0	100,000	100,000
Land	0	0	0	0	0	0	0
Improvements	0	0	0	0	0	685,000	685,000
Equipment	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Totals	0	0	0	0	0	1,000,000	1,000,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Infrastructure Fund	0	0	0	0	0	1,000,000	1,000,000
Totals	0	0	0	0	0	1,000,000	1,000,000

FINANCE NOTES

**City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM**

Category	Project		Estimate Level
Sewer Improvement	New	Supervisory Control & Data Acquisition (SCADA)	1

CONTACT: Steve Erickson [3301]

PRIORITY: Projects Which Avoid Future Additional Costs

DESCRIPTION

A Supervisory Control and Data Acquisition (SCADA) system provides real-time data, such as wet well level, and pump operational status to sewer system operators. Operators can use this data to identify operational problems. SCADA allows for remote monitoring and operation of pumps to implement corrective actions and maintain wastewater discharge to the regional wastewater treatment plant.

COMMENTS:

Currently operators rely on unsophisticated alarms and must drive to sites to evaluate the problem and implement corrective action. This work includes analysis and design only. Additional funding is required for installation.

Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	0	0	200,000	200,000
Administration	0	0	0	0	0	50,000	50,000
Totals	0	0	0	0	0	250,000	250,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	0	0	0	0	250,000	250,000
Totals	0	0	0	0	0	250,000	250,000

FINANCE NOTES

**City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM**

Category	Project	Estimate Level
Sewer Improvement	New Venus Pump Station Rehabilitation	1

CONTACT: Steve Erickson [3301]

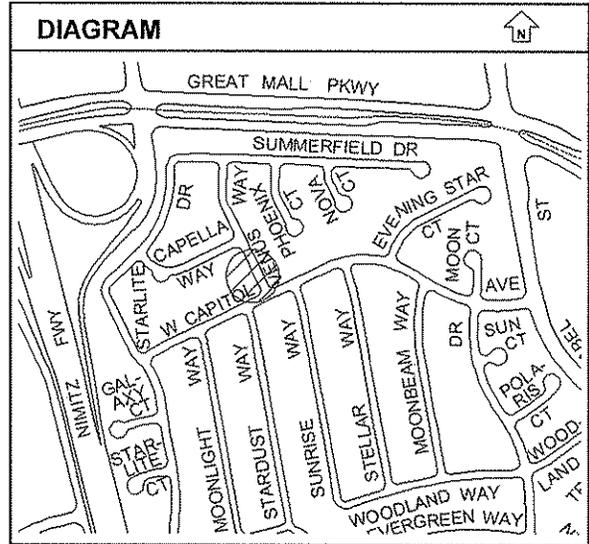
PRIORITY: Rehabilitation of Existing Capital Assets or Systems

DESCRIPTION

This project provides rehabilitation or replacement of equipment at the Venus Pump station.

COMMENTS:

The last equipment upgrade occurred in 2004-06 and the equipment life is estimated at 10 years.



Uncommitted Balance as of 6/30/2013: \$0

ESTIMATED COST	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Design	0	0	0	0	0	10,000	10,000
Administration	0	0	0	0	0	5,000	5,000
Inspection	0	0	0	0	0	5,000	5,000
Equipment	0	0	0	0	0	30,000	30,000
Totals	0	0	0	0	0	50,000	50,000

FINANCING	Prior Year	2013-14	2014-15	2015-16	2016-17	2017-18	Total
Sewer Fund	0	0	0	0	0	50,000	50,000
Totals	0	0	0	0	0	50,000	50,000

FINANCE NOTES

**City of Milpitas
2013-18 CAPITAL IMPROVEMENT PROGRAM**

Appendix J

Plans, Map Procedures, Guidelines

Engineering Plans, Map Procedures and Guidelines located in:

<http://www.ci.milpitas.ca.gov/government/engineering/plans.asp>

or search for Engineering Plans, Map Procedures and Guidelines on web

Appendix K

Standard Specifications

XXII. CITY OF MILPITAS STANDARD SPECIFICATIONS

A. STANDARD SPECIFICATIONS FOR SANITARY SEWERS

SECTION S

S1 GENERAL

S1.01 SCOPE OF WORK: The work shall include the furnishing of all materials, labor, tools, implements, and equipment necessary to construct and test the sewers with all appurtenances, complete and ready to operate, including final cleanup job of site; all construction to be in accordance with the details show in the plans, the standard drawings of the City of Milpitas, and with the provisions of these specifications.

S1.02 Definitions:

S1.02.01 “State Specifications” refers to the Standard Specifications of the State of California, Department of Transportation, latest edition.

S1.02.02 “ASTM” refers to ASTM International, the successor organization of the American Society for Testing and Materials.

S1.02.03 “City Engineer” shall mean the Engineer of the City of Milpitas, acting personally or through his or her designated representatives acting within the scope of the particular duties entrusted to them.

S1.02.04 “Owner” shall mean the party entering into the contract for whom the performance of the work covered by this contract is being done when the City is not a contracting agency.

S1.02.05 “Owner’s Engineer” shall mean the Engineer engaged by the Owner, acting within the scope of the particular duties assigned by the Owner.

S1.02.06 “Inspector” shall mean the Engineering or technical inspector or inspectors duly authorized and appointed by the City Engineer, limited to the particular duties entrusted to them.

S1.02.07 “Contractor” shall mean the party entering into contract for the performance of the work covered by this contract and his authorized agents or legal representatives.

S1.02.08 Phrase “or approved equal” shall mean only that which has been approved as equal in writing by the City Engineer in response to a written request to consider an alternate as being equal. Such a request shall be made by the Contractor when the City is the contracting agency, or by the Owner when the City is not the contracting agency.

S1.02.09 “A.B.S. Pipe” shall mean acrylonitrile-butadiene-styrene sewer pipe.

S1.02.09 “PVC Pipe” shall mean polyvinyl chloride sewer pipe.

- S1.03 Safety Provisions: The Contractor shall conform to the rules and regulations pertaining to safety established by the California Division of Industrial Safety.
- S1.04 Special Conditions: Special Engineering consideration shall be given to a special specification written for any pipe construction with a ditch depth of less than 5 feet or greater than 15 feet. Where sewers cross or approach any other underground utility or structure within one foot, special encasement of the sewer line is required, and details of such crossing or approach must be approved by the City Engineer.
- S1.05 Inspection: As the work progresses, each phase of the work must be inspected and approved before the next phase of construction is started. This condition is not meant to restrict the Contractor from carrying on simultaneous operations of several phases of construction in different areas of location within the project. The Contractor will notify the City Engineer at least 24 hours in advance when inspection will be needed, and shall keep the City Engineer informed of the schedule of work.
- S1.06 Construction Staking: The Contractor will notify the City Engineer (or the Owner's Engineer, when the City is not the contracting agency) at least 48 hours in advance of needing construction stakes.
- S1.07 Material Guaranty: Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition, and manufacture of any or all materials to be used in the project, subject to the tests provided for in these specifications to determine their quality and fitness of the work.
- S1.08 Interpretation: The general plans, standard drawings, details and specifications are intended to depict, without requiring interpretation, the work and working conditions of the contract. Should interpretation be required, such interpretation shall be made by the City Engineer as provided for in the General Conditions.
- S1.09 Authority of City Engineer: The City Engineer shall decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the manner of performance and rate of progress of work; all questions which may arise as to interpretation of the plans and specifications; all questions as to the acceptable fulfillment of the contract on the part of the Contractor; and, when the City is the contracting agency, all questions as to the compensation. His decision shall be final and he shall have authority to enforce and make effective such decisions and orders which the Contractor fails to carry out promptly.
- S1.10 Superintendence: The Contractor shall keep on this work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the City Engineer. The Superintendent shall not be changed except with the City Engineer's consent, unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The Superintendent shall represent the Contractor in his absence and all directions given to him shall be binding as if given to the Contractor. The Contractor shall furnish the City Engineer the names and phone numbers of two

responsible men, one of whom may be reached at all times that the work is not in progress, to be called in case of any emergency on the work.

- S1.11 Connection System: Only service connections conforming to established standards of the City may be connected to sewers.
- S1.12 Changes in Work: If, in the opinion of the City engineer, the strict application of these specifications is impractical and will not provide the results desired, then the City Engineer may prescribe such alternate methods deemed necessary.
- S1.13 Abandoned Pipes, Wells, Etc.: When, in the course of the work, a Contractor encounters or discovers in the work area any abandoned pipes, conduits, sumps, septic tanks, wells, or any condition that could cause failure to any part of the work, or constitute a threat to the public health or safety, that condition shall be rendered harmless by the Contractor to the satisfaction of the City Engineer.
- S1.14 A.B.S. Pipe Allowed: A.B.S. Composite Sewer Pipe shall only be allowed for residential sewage flows. All pipes transporting commercial sewage, full strength industrial sewage or commercial/industrial sewage from other connected sewer lines shall not be A.B.S. Composite Sewer Pipe.

S2 MATERIALS

The Contractor shall furnish all materials required to complete the work. The materials furnished and used shall be new except as may be specifically provided elsewhere in these specifications, on the plans or in the special provisions. The materials shall be manufactured, handled, and used in a workmanlike manner to ensure complete work in accordance with the plans and specifications. Damaged or defective material shall be removed from the work or job site whenever discovered.

- S2.01 Portland Cement Concrete: Portland Cement Concrete shall conform to all applicable provisions of State Specifications, Section 90.
- S2.01.01 Class A Concrete (6-sack) shall be used for all construction except pipe encasement.
- S2.01.02 Class B Concrete (5-sack) shall be used for pipe encasement or for protective cover slab over encasement as required by Standard Drawing 220.
- S2.01.03 Class C Concrete (4-sack) shall be used for protective cover slab over encasement as required by Standard Drawing 222, where pipe trench does not involve street breakout.
- S2.02 Polyvinyl Chloride (PVC) Pipe and ABS Composite and ABS Solid Wall Pipe.
- S2.02.01 Extent: The specifications shall govern the furnishing of all PVC pipe, ABS composite pipe, and ABS solid wall pipe to be installed by the Contractor in the locations shown on the plans and in the manner hereinafter stipulated.

S2.02.02

Pipe Quality and Manufacture: PVC sewer pipe and fittings shall be manufactured in accordance with one of the following Standard Specifications:

- a. ASTM D3034, "Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings"
- b. ASTM F679, "Standard Specification for Poly (Vinyl Chloride) (PVC) Large- Diameter Plastic Gravity Sewer Pipe and Fittings"
- c. ASTM F794, "Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter"
- d. ASTM F949, "Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings"
- e. ASTM F1336, "Standard Specification for Poly(Vinyl Chloride) (PVC) Gasketed Sewer Fittings"
- f. ASTM F1760, "Standard Specification for Coextruded Poly(Vinyl Chloride) (PVC) Non-Pressure Plastic Pipe Having Reprocessed-Recycled Content"
- g. ASTM F1803, "Standard Specification for Poly (Vinyl Chloride) (PVC) Closed Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter"

ABS composite sewer pipe and fittings shall conform to ASTM D2680. ABS solid wall pipe shall conform to ASTM D2751. Standard Diameter Ratio (SDR) of any ABS solid wall pipe shall not exceed 23.5.

PVC pipe and fittings, ABS composite pipe and fittings, and ABS solid wall pipe and fitting shall be of the bell and spigot type. The ends of the pipe shall be formed so that when the pipes are laid together and joined, the pipe will form a continuous line with a smooth interior surface. All fittings shall be compatible with the pipe to which they are attached.

Caps shall be furnished with branch pipes that are to be left unconnected. Caps shall consist of the same materials as the pipe. Caps of the type recommended by the pipe's manufacturer shall be used.

All pipe furnished under these specifications shall be first quality. Each length of pipe shall be sound and durable, free from objectionable defects. All pipe shall be free from cracks, warps, and blisters. The pipe shall be smooth and the ends of each length shall be square with longitudinal axis. The City Engineer reserves the right to test sections of pipe at the site of manufacture and the supplier will furnish all materials and equipment, necessary to conduct such tests.

S2.03

Joints: All PVC pipe joints shall be gasketed, bell-and-spigot, push-on type conforming to ASTM D3212, "Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals." Since each pipe manufacturer has a different design for push-on joints, gaskets shall be part of a complete pipe section and purchased as

such. Gaskets may be factory installed or field installed as recommended by the pipe manufacturer. Lubricant shall be as recommended by the pipe manufacturer.

S2.04 Castings: All castings for manhole rings, covers and other purposed castings shall conform accurately to the form and dimensions shown on the detailed drawings. They must be of workmanlike finish, free from blow and sand holes or defects of any kind, and shall possess a tensile strength of not less than sixteen thousand (16,000) pounds per square inch.

Before leaving the foundry, they shall be thoroughly cleaned and coated with asphalt applied in such a manner as to provide a firm, durable and tenacious coating.

The bottom rim of the cover and the seat of the frame shall be so matched that the cover shall set evenly and firmly in the frame, without movement or noise when driven over with a rubber-tired vehicle.

S2.05 Precast Manholes: Manhole sections, tapered sections and adjustment rings shall conform to the applicable requirements of State Specifications, Section 70, and Standard Drawing 230, 1 of 4.

S2.06 ABS Composite and Solid Wall Pipe Joints: Except where otherwise specified or directed, the Contractor shall provide solvent welded joints on all ABS sewer lines under this contract. Solvent cement compound must conform to ASTM D2680.

S3 **CONSTRUCTION PROCEDURE**

S3.01 Excavation: Trenches shall be excavated, either by hand or by machine, beginning at the outlet and proceeding upgrade. All trenches shall be excavated vertically and shall be of open construction. Tunneling will not be permitted except where permission is given by the City engineer and the dimensions and method of construction and backfilling have been definitely approved by him.

All trenches shall be of sufficient width to provide free working space on each side of the pipe, but in no case shall it be wider than $3/2$ diameter + 12" except that 4 or 6-inch pipe may be laid in a 2-foot trench. Where bracing or shoring is necessary, an additional width as directed by the City engineer will be allowed. In all cases, there shall be sufficient space between the pipe and the sides of the trench to thoroughly backfill and compact around the pipe.

The Contractor shall undercut the trench to a depth of at least 2" below the final position of the bell of the pipe. The trench shall then be thoroughly cleaned of all loose material, after which the trench shall be backfilled to a depth of 2" above the invert of the pipe. Backfill material shall be sand or granular material of the quality specified as suitable for encasement material for water mains and sewers in City of Milpitas Standard Drawing No. 222. The pipe bed shall then be formed by hand to final grade and the bell holes excavated. In excavating bell holes, care shall be taken not to mix earth with casement material.

No pipe shall be laid until the City Engineer or his Inspector inspects and approves the condition of the bottom of the trench.

S3.02 Bracing and Shoring: The Contractor shall at all times furnish, install and maintain sufficient bracing and shoring in trenches in conformity with requirements of the California Division of Industrial Safety to ensure the safety of workmen and to protect and facilitate the work. Where practical, all such bracing and shoring shall be removed from the trench as the backfilling proceeds.

S33.03 Removal of Water and/or Unstable Material from Trenches: The Contractor shall furnish and install all sheet piling required and shall furnish, install and operate such pumps or other device as may be necessary for removing water from trenches during construction of the sewer lines. Ground water shall be removed by laying drain rock or gravel on the bottom of the trench or by other means which will prevent ground water from softening the bottom of the trench. If unstable material is encountered at excavation grade, such unstable material shall be removed to the depth directed by the City Engineer. The cost of dewatering and/or stabilizing the trench bottom shall be considered to be included in the bid price for the work, unless specifically provided for otherwise.

S3.04 Laying of Sewer Pipe: Pipe and fittings should be installed in accordance with ASTM D2321, "Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications."

In view of the fact that in the operation of the City's system of sewers and appurtenances, it will be necessary to treat the sewage, it is particularly important that sewer lines constructed under this contract be substantially watertight.

The Contractor shall take note of this fact and shall exercise every precaution to secure watertightness throughout the component parts of the system, particularly as regarding the joining of all pipe lengths, the use of sound pipe only, the capping of all unconnecting ends, and the sealing of all pipes to structure joints. The Contractor shall follow the detailed specifications and shall conform with the intent, thereof, to secure the highest quality of workmanship in the laying of all sewer lines under the contract. All jointing of pipe shall be subject to rigorous inspection by the City Engineer or his Inspector.

S3.04.01 Bedding the Pipe: The concave bed shall be cut in the granular material by hand in a careful manner. The line and grade shall be strictly adhered to, without wedging or blocking. Should the Contractor, through his negligence or other fault, excavate below or beyond the designated lines or grades, he shall replace such excavation with approved bedding materials at his own expense.

S3.04.02 Bell Holes: As laying of pipe with bell and gasket joints proceeds, bell holes shall be excavated at each joint to facilitate the jointing operations and shall be only of sufficient size for that purpose. In order that the bell holes may be properly located, not more than six (6) bell holes shall be excavated ahead of actual pipe laying on account of the variations in joint construction operations.

S3.04.03 Solvent Cemented Joint Installation: Prior to application of solvent cement, the pipe ends must be free of dirt or other foreign matter. Solvent cement shall be applied to the inside of the socket and to the outside of the spigot end. Enough solvent cement shall be applied that when the spigot is fully inserted into the socket, a bead of excess cement will form around the entire circumference of the outside juncture of said spigot and socket. The Contractor shall apply a coating of cement to all pipe ends of ABS composite pipe whether within a coupling or not. The spigot shall then be inserted into the socket.

S3.04.04 Laterals: The term "Lateral" as used in these specifications, on the Plans, or other drawings, is used to designate the branch sewers laid from the main sewer to points on the property lines from which sewer services can be obtained by proper extensions.

All provisions for sanitary sewers of these specifications are applicable to this item and shall be adhered to as if specifically enumerated herein.

Laterals shall be laid either from the upper end of a wye branch or "T" saddle connected to the main sewer to the property, and shall have a minimum slope of 1/4" per foot. Wye branch connections must be used on main sewers 12" in size or less. "T" saddles may be used to connect laterals to trunk sewers larger than 12" in size. Where "T" saddle fittings are used, the hole in the trunk sewer shall be made of the proper size to receive the saddle. Where laterals are tapped onto existing VCP mains, machine taps shall be made.

ABS saddles shall be installed as recommended by the manufacturer. No concrete support shall be used for ABS saddles.

The lateral pipe shall be laid to a grade of one-fourth inch (1/4") vertical rise to one foot (1') run of pipe, but this grade may be increased in order that the depth at the property line shall be approximately five feet (5'), unless otherwise directed by the City Engineer. Laterals shall be installed in compliance with Standard Drawing No. 620. ABS pipe of same dimensions may be used instead of the vitrified clay pipe called out in these drawings in residential sewer lines only.

The letter "S" shall be stamped or chiseled on the face of the curb opposite the end of the lateral at the property line. If no sidewalk or curb exists, a 2" x 3" by 3" redwood marker, with a stamped "S" on the side of the stake, shall be placed at the end of the lateral. Where only the wye is placed, as in an easement, it will be marked the same as a lateral.

S3.04.05 Wyes: Each wye branch shall be of the same material as that of the main sewer in which it is placed. Exact location of all wye branches shall be determined in the field by the property owner or his representative with the cooperation of the Contractor. Particular care shall be used in placing encasement around wyes to assure that the wye is fully supported.

S3.04.06 Caps or Stoppers: Stoppers, referred to in these plans and specifications as “stoppers” or “caps” shall be placed and secured in all openings into the upstream end of sewers including wyes and laterals. Temporary “stoppers” shall be used at the end of each day’s work or whenever the work has been interrupted. When mechanical compression joints are used, stoppers of the same joint material may be used. “Stoppers” shall be of material similar to the pipe itself. They shall be of a type supplied or recommended by the pipe manufacturer.

S3.05 Manholes: Pre-case concrete manholes shall be built at the places shown upon the plans and shall be of form and dimensions shown upon the detailed drawings. The base or foundation shall consist of concrete. Material for the concrete shall conform to the specifications herein before given. Pipe to manhole joints and manholes shall be sealed as needed to meet leakage tests. . Joints on pre-cast manholes shall be bituminous type such as “Ram Neck” or approved equal. PVC or ABS pipe entering or leaving a manhole shall have a rubber “O” ring water stop. These water stops shall be of the type recommended by the pipe manufacturer.

The bases shall be carefully formed so as to make invert channels for the sewers. The depth and the top width of the invert channel shall be equal to, and not greater than, the internal diameter of the pipe.

Bases for pre-cast manholes shall be formed, using circular metal form to provide a key or socket of proper cross section, into which the pre-cast manhole section can be placed.

All mortar used in construction of manholes shall consist of one (1) PART Portland Cement and two (2) parts sand. Hydropel or equal shall be used as an admixture in the amount of one and one-half (1-1/2) gallons per sack of cement. Pipe to manhole joints and manholes shall be sealed as needed to meet leakage test.

S3.06 Backfilling: After the pipe is satisfactorily laid in place, the pipe encasement shall be placed and compacted by hand. Pipe shall be covered to a height of 6” above the top of the pipe by encasement material. Encasement material shall be of the quality specified as encasement material for sewer and water mains in Standard Drawing No. 222.

Above the encasement, backfill shall conform the provisions of standard Drawing Nos. 220 and 222. Material placed within one foot of subgrade shall be compacted to 90% relative density by rolling or other “dry” methods. Above subgrade the standard roadway construction method shall govern.

S3.07 Removal and Replacing Culverts, Poles, Etc.: Wherever existing culverts, power, telephone or guy poles or other such existing facilities interfere with the construction of the sewer lines or appurtenances, the Contractor shall be responsible for their removal and also for their relocation. The cost of removing and relocating all such existing facilities shall be included in the bid price for sewer and no additional allowance shall be made therefore.

S3.08 Restoring Pavements, Curbs, Gutters, Sidewalks, Etc.: Whenever such existing improvements as pavements, curbs, gutters, sidewalks, driveways, utilities, etc., have

been cut or damaged in order to construct sewer lines, the backfill shall be thoroughly compacted and all improvements restored to the condition in which they were before the excavation was made. The cost of restoring all original improvements shall be included in the unit bid price for sewer and no additional allowance shall be made therefore. All street breakout shall be in accordance with Standard Drawing No. 220.

S3.09 Disposal of Excess Material: Excess materials which have been excavated from trenches, and which cannot be utilized for backfill shall be removed by the Contractor and shall be deposited as directed by the City engineer where work is in public land, or by Owner's Engineer where work is newly developed land where the City is not the contracting agent.

S3.10 Flushing of sanitary sewer Lines: The sanitary sewer line will be flushed with water to the satisfaction of the City engineer or his representatives. The Contractor will provide rubber plugs for the main line to be used to build a hydraulic pressure prior to flushing. During the flushing, a rubber sphere with a diameter equal to the pipe diameter will be passed through the main. Failure to pass will necessitate removal of the cause of the stoppage. The Contractor will provide the necessary rubber spheres. Flushing of sewers is to be done after manholes are raised.

S3.11 Testing of Sanitary Sewer Lines: All newly constructed sewer mains and laterals adjacent thereto shall be tested for leakage as described in the Engineering Guidelines for sewers.. The Contractor shall furnish all materials, equipment, tools and labor necessary to make leakage tests and to perform any work incidental thereto.

Leakage test shall be performed on the entire sanitary sewer installed, with the length of each test section limited to the pipe segment between adjacent manholes.

The Contractor shall follow the detailed specifications and shall conform with the intent thereof to secure the highest quality of workmanship in the laying of all sewer lines under the contract. All jointing of pipe shall be subject to rigorous inspection by the City Engineer or his representative.

When a sewer is constructed as part of the improvements of a street or road testing of the lines shall be done at such time that the subbase has been compacted and accepted by the City Engineer.

The Low Pressure Air Test shall be the accepted method used to determine watertight integrity of all sanitary sewers. The Hydrostatic Leakage Test method will only be used when specifically authorized by the City Engineer.

In addition to the Low Pressure Air Test, ABS sewer lines shall also be tested for deflection by passing a rigid mandrel through them.

The Low Pressure Air Test shall be done in the presence of the City's Inspector and in accordance with the following procedure:

- (1) Plug and securely brace the ends of each reach of pipeline to be tested.

- (2) Pressurize scaled line until internal air pressure reaches 4.0 pounds per square inch gauge. When prevailing water is above the sewer line being tested, increase all pressures used in this test by 0.43 psi for each foot the water is above the flow line of the pipe.
- (3) Allow at least two minutes for the air pressure to stabilize, adding additional air as required to maintain 4.0 psig.
- (4) The Inspector shall observe the pressure gauge attached to the pipeline and when the pressure decreases to 3.5 psig, a timing period shall be started. The timing period shall be stopped when the pressure has decreased to 2.5 psig or until the portion of line being tested is found to be "Acceptable."
- (5) The portion of line being tested shall be termed "Acceptable" if the time required in minutes for the pressure to decrease from 3.5 psig to 2.5 psig is not less than the time shown for the given pipe diameters in the following table:

<u>Pipe Diam. In Inches</u>	<u>Minutes</u>
4	2.0
6	3.0
8	4.0
10	5.0
12	6.0
15	7.5
18	8.5
21	10.0
24	11.5
27	13.0
30	14.5
33	16.0
36	17.5
39	19.0
42	21.5

- (6) If adjoining laterals are tested concurrently with the sanitary sewer main, one-half of the above listed respective time for the largest lateral tested shall be added to the respective required time listed for the sanitary sewer main.
- (7) If the line fails to meet the above requirements, the source of the leak shall be located and corrected to the satisfaction of the Inspector. After the leak or leaks are corrected and the trench is rebackfilled and compacted, the section of the line shall then be retested to compliance.

Because of the inherent danger involved in air testing, extreme care shall be exercised in placing and bracing the pipe plugs, and no one shall be allowed in the manhole during testing. Caution shall also be taken to avoid over-pressurizing and damaging an otherwise acceptable line.

When Hydrostatic Leakage Test, in lieu of the air test, is authorized by the City Engineer, it shall be done in the presence of the City's Inspector and in accordance with the following procedure:

Each section of the sewer main to be tested shall be sealed by inserting stoppers in the lower end of the sewer segment, the inlet pipe of the upper manhole and any side sewers. The pipe and upstream manhole shall be filled with water to a point not less than four (4) feet above the invert of the pipe or prevailing ground water elevation, whichever is higher. The line shall be tested for at least two (2) hours, maintaining the head specified above by measured additions of water. The sum of the additions of water added shall be the amount of leakage for the test period.

When the amount of leakage, in a section, exceeds the allowable, the Contractor shall locate the source of the leak or leaks and correct such leaks to the satisfaction of the inspector. After the leak or leaks are corrected and the trench backfilled and compacted, the section of the line shall then be retested to compliance.

The maximum leakage allowed shall be 200 gallons per inch of pipe diameter per mile per 24 hours (0.0263 gallons per minute per inch of pipe diameter per 1000 feet of pipe).

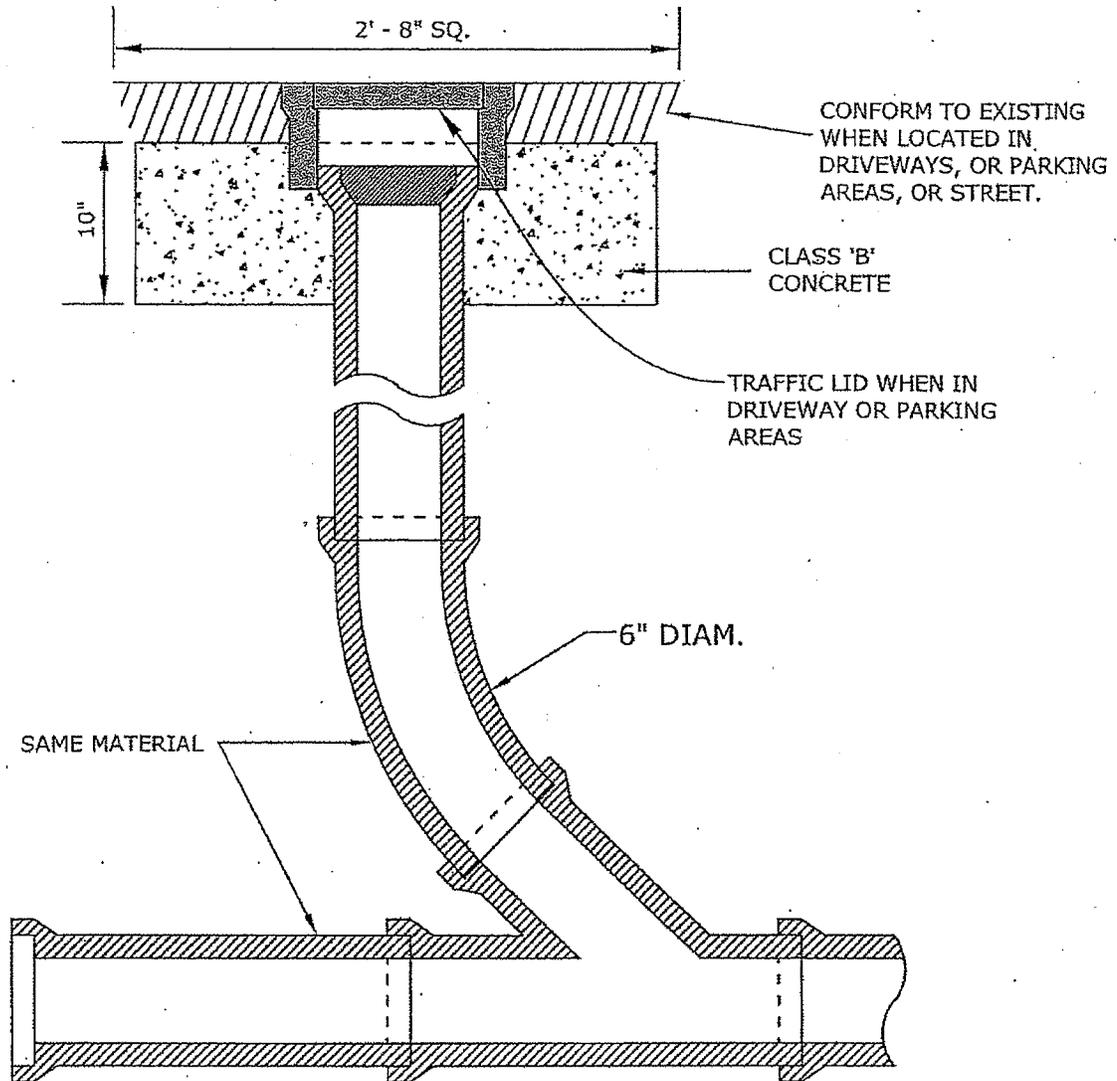
PVC and ABS pipe shall be tested for deflection in the presence of the City's Inspector and in accordance with the following:

- 1) Immediately after flushing, a solid mandrel undersized 5% shall be pulled through all lines, excluding laterals.
- 2) Any section of pipe through which the mandrel cannot be pulled will be considered defective and shall be replaced by the Contractor at his expense. The replaced section of line shall be rebackfilled and compacted, this work meeting City specifications. The section shall then be retested to compliance.

S3.12 Maintenance Bond: The Contractor shall maintain the complete installation for a period of one year after acceptance of the installation by the City and shall furnish bond to guarantee such maintenance. Any discrepancies or failures in the work that appear during this period shall be remedied before the bond is released.

Appendix L

Standard Drawings

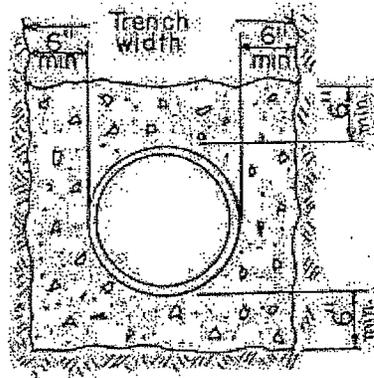


NOTES:

1. All castings to be asphalt coated by hot dip method.
2. Clean out shall be raised to finish surface.
3. Cleanout box and lid shall be Christy G5 BOX and G5C lid and G5GR Grade Ring or approved equal with C.O." or "S" marking.
4. For pipe material see City's Standard Specifications and approved plans.

NOT TO SCALE

CITY OF MILPITAS, ENGINEERING DIVISION		STANDARD FLUSHING INLET	STANDARD DRAWING NO. 602
REVISION	DATE		DATE : 6/15/10
1	1991	APPROVED BY: 3 PUBLIC WORKS DIRECTOR / CITY ENGINEER RCE No. 40283	SHEET 1 OF 1
2	2001		
3	2010		



Class B Concrete

REV.	DATE	APPROVED	DESIGN	<p>CITY OF MILPITAS</p> <p>PUBLIC WORKS DEPARTMENT</p> <p>ENGINEERING DIVISION</p> <p>STANDARD DRAWING</p>	<p>CONCRETE JACKET</p>	NO. 606
			DRAWN			ADOPTED
			CHECKED			S-MINUTES
			APPROVED BY			DATE 8-14-58
			<i>[Signature]</i> CITY ENGINEER			SHEET 1 OF 1
			DATE 10/18/91			

AIR TEST FORMULA

The contractor shall plug all lateral sewers. The sewer main ends shall be plugged and braced where needed, and if buildings have been connected, cleanouts shall be plugged also.

The Contractor will supply the necessary metering equipment and hoses for the test and a blower or compressor with adequate capacity to perform the test.

The line shall be supplied with air until 4 p.s.i.g. has been reached, at which time the flow to the pipe shall be shut off. The Inspector will then accurately determine the time of loss of 1 p.s.i. pressure in the range from 3.5 p.s.i.g. to 2.5 p.s.i.g.

The minimum time allowable for loss of 1 p.s.i. shall be computed by use of the following table or formula.

(Diameter of pipe in inches)² x 0.0109 = seconds per lin.ft. of pipe equals time required to lose one pound air pressure (from 3.5 pounds to 2.5 pounds) at a loss rate of 3 c.f.m.

EXAMPLE: 400 lin.ft. 8" V.C.P. , 8 x 8 x 0.0109 x 400 = 279
 + 400 lin.ft. 4" V.C.P. , 4 x 4 x 0.0109 x 400 = 70

349 sec. = 5 min. 49 sec.

If the time loss is less than 5 min. 49 sec. there are one or more leaks that exceed 3 c.f.m. per min.

For computation, the following table will apply:

Size of pipe	Seconds per lin.ft. of pipe
4"	.17
6"	.39
8"	.70
10"	1.09
12"	1.57
15"	2.45
18"	3.63
21"	4.81
24"	6.28
27"	7.95
30"	9.82
33"	11.88
36"	14.14

Any pipe test section losing a pound of air in less than this time will leak more than 3 c.f.m. and shall be rejected.

COMPARISON

The amount of water that will infiltrate at six foot head through this opening will vary from 10 to 60 gallons per hour, depending on the size and shape of hole or holes.

REV	DATE	APPROVED	DESIGN	CITY OF MILPITAS PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION STANDARD DRAWINGS	AIR TEST FOR SEWER MAINS	NO. 610
			DRAWN			ADOPTED
			CHECKED			S# 59
			APPROVED BY <i>[Signature]</i> CITY ENGINEER			DATE: 2/9/61
			DATE: 10/2/61			SHEET 1 OF 2

DIRECTIONS

Use straight edge
 Scales 1 & 4 give T values on scale 5
 Scales 1 & 2 give T values on scale 3

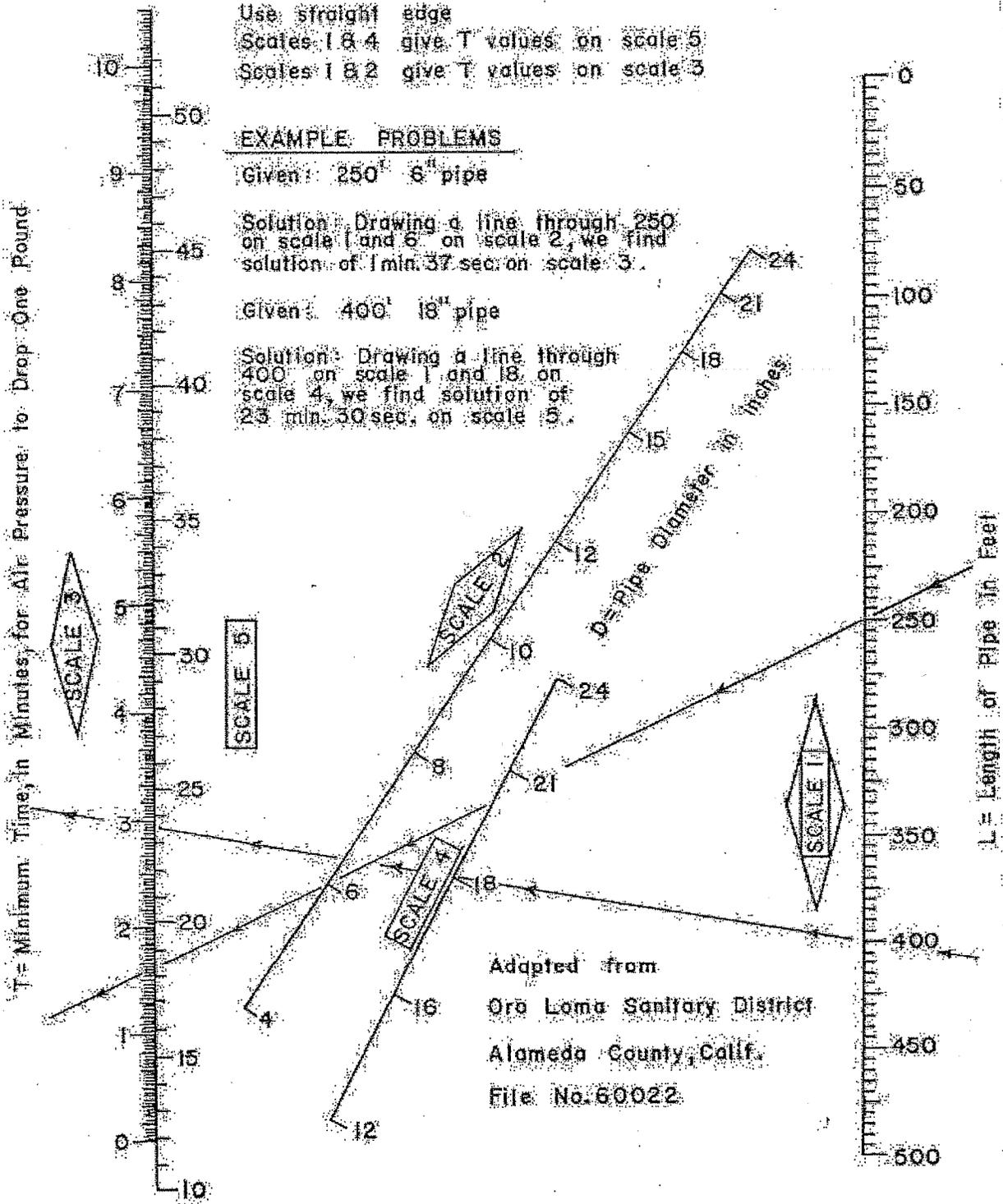
EXAMPLE PROBLEMS

Given: 250' 6" pipe

Solution: Drawing a line through 250 on scale 1 and 6" on scale 2, we find solution of 1 min. 37 sec. on scale 3.

Given: 400' 18" pipe

Solution: Drawing a line through 400 on scale 1 and 18" on scale 4, we find solution of 23 min. 50 sec. on scale 5.



Adapted from
 Oro Loma Sanitary District
 Alameda County, Calif.
 File No. 60022

NOMOGRAPH FOR AIR PRESSURE TEST

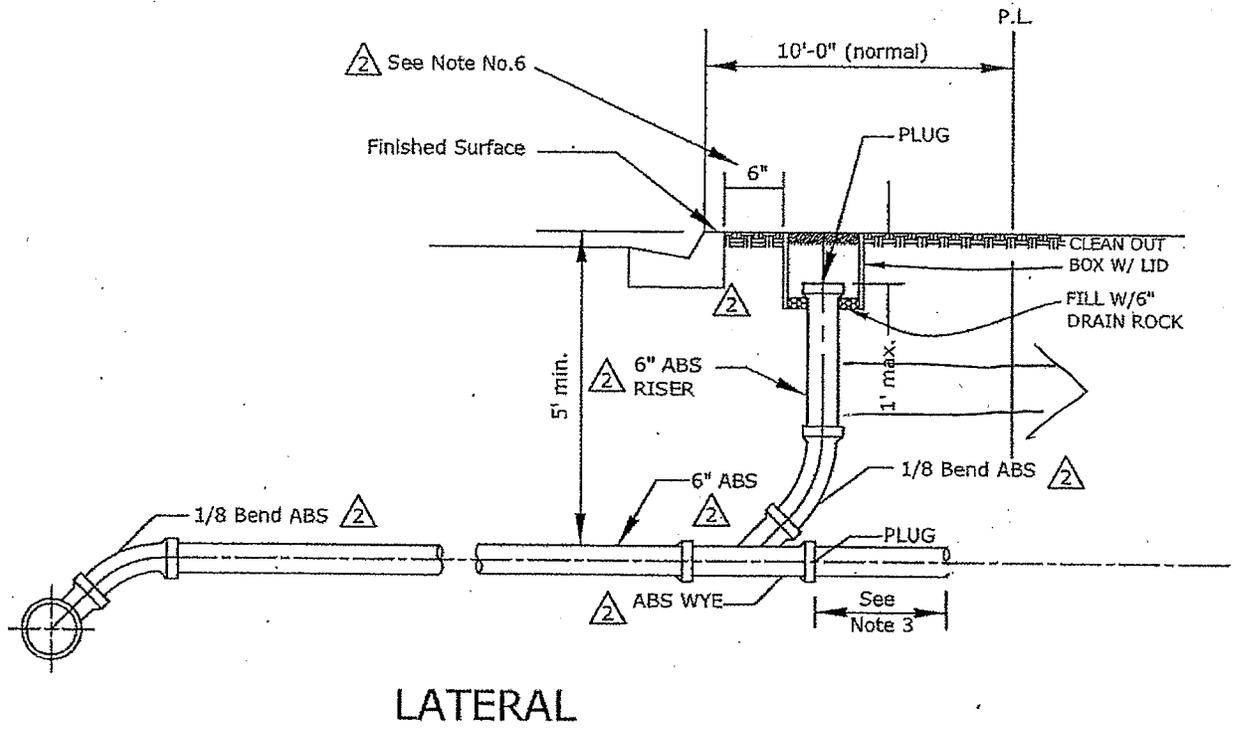
REV.	DATE	APPROVED	DESIGN
			DRAWN
			CHECKED
			APPROVED BY
			<i>[Signature]</i> CITY ENGINEER
			DATE 10/3/41

CITY OF MILPITAS
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION
 STANDARD DRAWING

**AIR TEST
 FOR
 SEWER MAINS**

NO. 610

ADOPTED
 S# 59
 DATE 2/9/51
 SHEET 2 OF 2

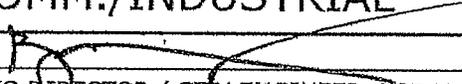


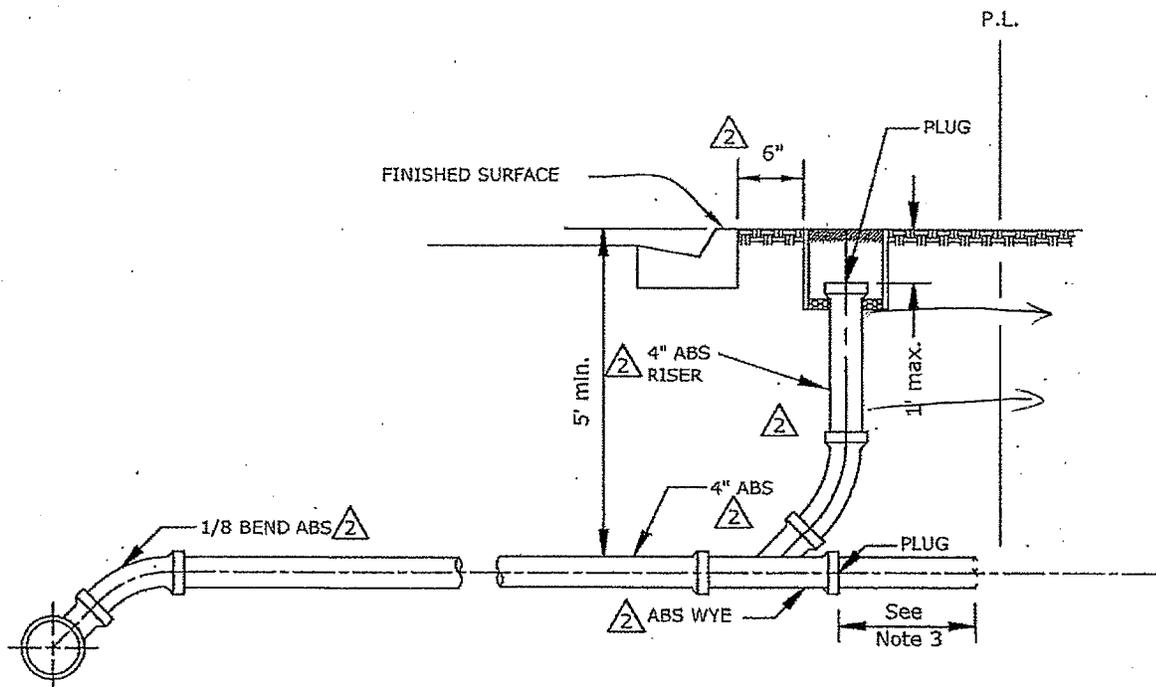
LATERAL

Notes:

1. Cleanout box and lid shall be per Standard Drawing No. 602.
2. Plug shall be vitrified clay or rubber.
3. Customer service connection shall be made under the supervision of the Building department. (If on private property)
4. Riser shall be the same size as sewer lateral.
5. Minimum grade at lateral shall be 1/4" per foot.
- △ 6. Pipe material shall be ABS from main to C.O.. Cleanout should be placed 6" behind street curb or as approved by City Engineer.

NOT TO SCALE

CITY OF MILPITAS, ENGINEERING DIVISION		SANITARY SEWER LATERAL - COMM./INDUSTRIAL	STANDARD DRAWING NO. 618
REVISION	DATE		DATE : 6/15/10
△ 1	1991	APPROVED BY:  PUBLIC WORKS DIRECTOR / CITY ENGINEER - RCE No. 40283	SHEET 1 OF 1
△ 2	2001		
△ 3	2010		

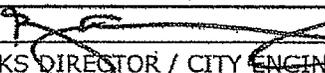


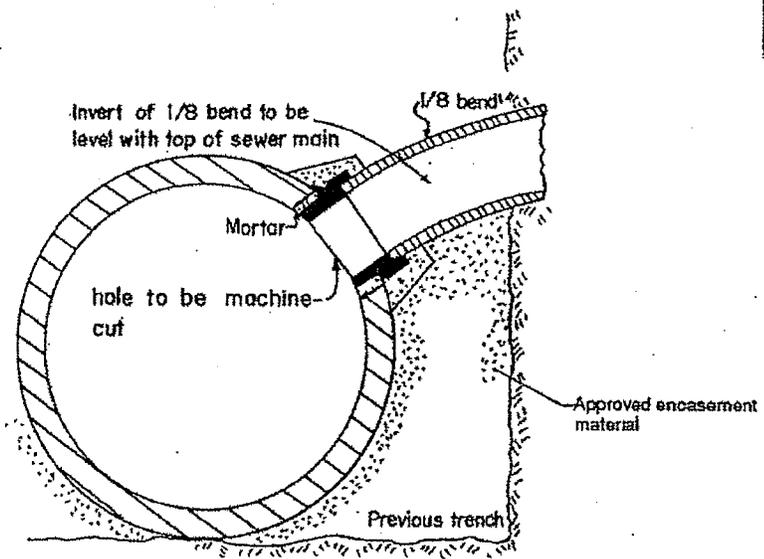
LATERAL

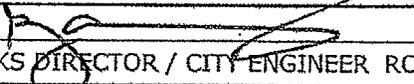
Notes:

- 1. Clean out shall be installed as shown hereon. Clean out box shall be Christy G-5 BOX and G5C Lid and G5GR Grade Ring or approved equal with "C.O." or "S" marking. Cast iron traffic cover (Christy G-5 or approved equal) is required in sidewalk & driveway.
- 2. Plug shall be vitrified clay or rubber.
- 3. Customer service connection shall be made under the supervision of the Building department. (If on private property)
- 4. Minimum grade of lateral shall be 1/4" per foot.
- 5. Riser shall be the same size as sewer lateral.
- 6. Pipe material shall be ABS from main to C.O.. Cleanout should be placed 6" behind street curb or as approved by City Engineer.

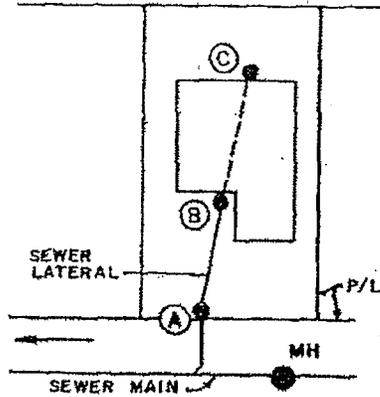
NOT TO SCALE

CITY OF MILPITAS, ENGINEERING DIVISION		SANITARY SEWER LATERAL - RESIDENTIAL	STANDARD DRAWING NO. 620
REVISION	DATE		DATE : 6/15/10
1	1966	APPROVED BY:  PUBLIC WORKS DIRECTOR / CITY ENGINEER RCE No. 40283	SHEET 1 OF 1
2	2001		
3	2010		



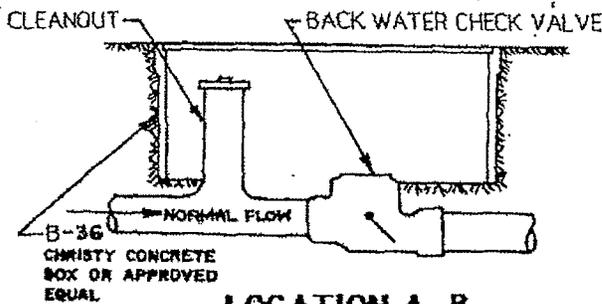
CITY OF MILPITAS, ENGINEERING DIVISION		STANDARD DRAWING NO. 622
REVISION	DATE	
1	1958	DATE : 6/15/10
2	2001	
3	2010	
CONNECTION TO EXISTING VCP SANITARY MAIN		SHEET 1 OF 1
APPROVED BY:  PUBLIC WORKS DIRECTOR / CITY ENGINEER RCE No. 40283		

BACKFLOW DEVICE LOCATION

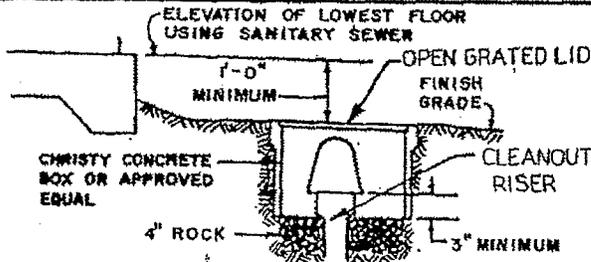


BACKFLOW DEVICE MAY BE LOCATED AT POINT (B) OR (C) AS APPROVED BY THE BUILDING OFFICAL ALL BACK FLOW OR OVERFLOW SHALL BE INSTALLED BELOW GRADE

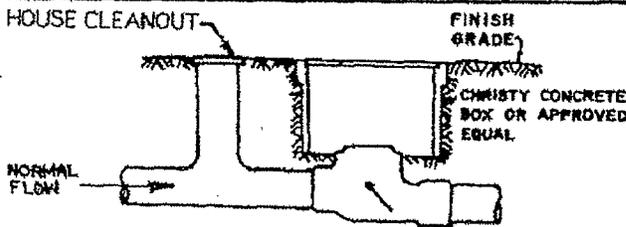
- (A) PER STANDARD DETAIL No.618 AND 620.
- (B) CLEANOUT AT JUNCTION OF BUILDING DRAIN AND SEWER LATERAL DEVICE SHALL BE INSTALLED BELOW FINISH GRADE.
- (C) TERMINAL UPPER CLEANOUT OEVISE SHALL BE INSTALLED BELOW FINISH GRADE



LOCATION A, B



OVERFLOW DEVICE INSTALLATION (BELOW GRADE) LOCATION A, B, C



BACKWATER CHECK VALVE INSTALLATION LOCATION A, B

NOTE

THE TYPE OF DEVICE USED SHALL BE AS DETERMINED BY THE BUILDING OFFICIAL IN ACCORDANCE WITH THE FOLLOWING CRITERIA

- 1 A BACKFLOW PROTECTION DEVICE SHALL BE INSTALLED WHEN THE ELEVATION OF THE LOWEST FLOOR CONTAINING GRAVITY WASTE DRAINAGE IS LESS THAN ONE FOOT ABOVE THE SURFACE ELEVATION OF NEAREST UPSTREAM PUBLIC SEWER STRUCTURE (MANHOLE, ETC)
- 2 A BACKWATER CHECK VALVE (AMERICAN FOUNDRY NO 52A OR APPROVED EQUAL) SHALL BE INSTALLED WHERE SEWAGE CANNOT OVERFLOW ONTO THE SURROUNDING AREA
3. AN OVERFLOW DEVICE (AS MANUFACTURED BY REAM MACHINE SHOP, LAFAYETTE, CALIFORNIA, OR APPROVED EQUAL) MAY BE INSTALLED WHERE SEWAGE CAN OVERFLOW ONTO THE SURROUNDING AREA WITHOUT DAMAGE TO PROPERTY

DEPTH	BOX SIZE
2' OR UNDER	B-9 10" X 17"
2' TO 3'	B-36 17" X 30"
3' OR UP	AS APPROVED

CITY OF MILPITAS, ENGINEERING DIVISION

STANDARD DRAWING
NO. 624

REVISION	DATE
①	1966
②	2001
③	2010

SEWAGE BACKFLOW PROTECTION DEVICE

DATE : 6/15/10

APPROVED BY:
PUBLIC WORKS DIRECTOR / CITY ENGINEER RCE No. 40283

SHEET 1 OF 1

Appendix M

Audit Record

SSMP AUDIT CHECKLIST

Each of the eleven SSMP Elements and their associated requirement(s) is represented in the checklist below. Either a **YES** or **NO** is provided for each question. If a **YES** is indicated, then the requirement is considered to be both compliant and current.

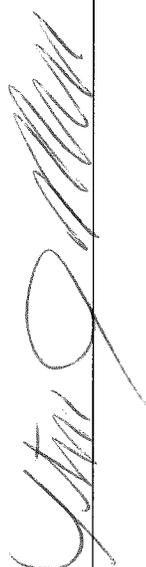
		YES	NO	REMARKS
ELEMENT 1 – GOALS				
A.	Do the goals provide a plan to properly manage, operate and maintain the sanitary sewer system to reduce, prevent and mitigate SSOs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 2 -- ORGANIZATION				
A.	Does the SSMP identify the responsible or authorized representative designated to sign and certify reports and other information required by the State or Regional Water Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B.	Does the SSMP identify the names and telephone numbers for positions responsible for implementing specific measures in the program?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Updates to the SSMP are on-going.
C.	Are lines of authority identified through an organization chart with a narrative explanation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D.	Is the chain of communication for SSO response and reporting, including person responsible for reporting SSOs to the State, Water Board and other agencies, current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 3 – LEGAL AUTHORITY				
Does the SSMP demonstrate that the City possesses the necessary legal authority to:				
A.	Prevent illicit discharges into the sanitary sewer system?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B.	Require proper design and construction of sewers and connections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D.	Limit discharges of FOG and other debris that may cause blockages?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E.	Enforce any violation of the City's sewer ordinances?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 4 – OPERATIONS AND MAINTENANCE PROGRAM				
A.	Does the SSMP contain an up-to date map of the sanitary sewer system showing all gravity line segments and manholes, pumping facilities,	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Future map will be from City's GIS program.

		YES	NO	REMARKS
	pressure pipes and valves and applicable stormwater conveyance facilities?			
B.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C.	Does the Preventative Maintenance program have a system to document scheduled and conducted activities, such as work orders?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D.	Does the City have a way to 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E.	Does the program include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation focusing on pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	The City is in the process of obtaining a contractor to CCTV the sewer system.
F.	Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Does the plan 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Once the CCTV program is established an assessment program will be developed.
G	Is training provided on a regular basis for sanitary sewer staff and require contractors to be appropriately trained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Training provided to inexperienced staff in the second half of 2012 and continued training in 2013 reduced the number of events in 2012; 4 to 3 in 2013.
H.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system, including identification of critical replacement parts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 5 – DESIGN AND PERFORMANCE PROVISIONS				
A.	Does the SSMP contain design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B.	Does the SSMP document procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 6 – OVERFLOW EMERGENCY RESPONSE PLAN				

		YES	NO	REMARKS
A.	Are proper notification procedures included so that primary responders and regulatory agencies are informed in a timely manner?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B.	Does the program ensure an appropriate response to all overflows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C.	Do procedures ensure prompt notification to regulatory agencies and affected entities of SSOs potentially affecting public health or reaching waters of the State and identify officials receiving immediate notification?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D.	Do procedures ensure that staff & contractor personnel are appropriately trained, are aware of and follow the Emergency Response Plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E.	Do procedures address emergency operations such as traffic and crowd control and other necessary response activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F.	Do procedures ensure that all reasonable steps are taken to contain and prevent the discharge of untreated or partially treated wastewater to waters of the United States and minimize/correct adverse impact on the environment resulting from an SSO, including accelerated or additional monitoring necessary to determine the nature & impact of the discharge?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 7 – FOG CONTROL PROGRAM				
A.	Does the program include a plan and schedule for a public education outreach program that promotes proper disposal of FOG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B.	Does the program include a plan and schedule for the disposal of FOG generated within the sanitary sewer system service area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C.	Does the City have legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D.	Are requirements to install grease removal devices, design standards for the removal devices, maintenance requirements, best management practices (BMP) requirements, record keeping and reporting established in the City's FOG Control Program?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E.	Does the City have enforcement and authority to inspect FOG producing facilities and sufficient staff to inspect and enforce the FOG ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F.	Does the City's FOG Control Program identify sections of the collection system subject to FOG blockages and establish a cleaning maintenance schedule for each section?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
G.	Does the program develop and implement source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified as being subject to FOG blockages?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN				

	YES	NO	REMARKS
A. Has the City prepared and implemented a capital improvement plan that will provide hydraulic capacity of key sanitary sewer system elements for dry, storm and wet weather peak flow conditions and events?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Has the City identified actions needed to evaluate the portions of the system that are experiencing or contributing to SSO discharges caused by hydraulic deficiency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C. Does the evaluation provide estimates of peak flows associated with conditions similar to those causing overflow events, estimates of key system components, hydraulic deficiencies and major sources that contribute to the peak flows associated with overflow events?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D. Does the City evaluate areas, where design criteria do not exist or are deficient, to establish appropriate design criteria?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E. Does the CIP include an implementation schedule and funding sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
F. Has the City developed an implementation schedule for all portions of the CIP, using the evaluation, design and capacity enhancement measures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A. Does the SSMP maintain relevant information that can be used to establish and prioritize appropriate SSMP activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Does the SSMP monitor the implementation and, where appropriate, measure the effectiveness of each element?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
C. Does the SSMP assess the success of the preventative maintenance program?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
D. If appropriate, is the City able to identify areas of concern and update program elements based on monitoring or performance evaluations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
E. Is the City able to identify and illustrate SSO trends, including: frequency, location and volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 10 – SSMP PROGRAM AUDITS			
A. Does the City conduct an internal audit, evaluating the effectiveness of the SSMP, at least every two years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Will the audit include deficiencies identified, if any, and steps to correct them?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
ELEMENT 11 – COMMUNICATION PROGRAM			

	YES	NO	REMARKS
A. Does the City communicate on a regular basis with the public on the development, implementation and performance of its SSMP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
B. Is there a communication system that gives the public an opportunity to provide input as the program is developed and implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

LRO Signature  Date May 6, 2014

Appendix N

Vendor List

Contractor services

1. Electric motor/pump repairs	Koffler electric/Mechanical Charlie Koffler	510-567-0630 510-715-0150
2. Fence repair	S&L Fence Richard Castillo	408-745-7021 408-595-7446
3. Pump repairs	Pump Repair service	415-467-2150
4. Fuel Supply	Valley Oil	650-967-2253 408-559-1839
5. Tire repair	Pro-1 Tires	408-735-8200
6. Tire Repair	Bruce's Tires	408-295-1742
7. Underground repairs	Preston Pipelines Dean Pires Simon Guardiloa	408-262-1418 408-640-8806 or 408-238-5147 408-640-8789 or 209-825-1993
8. Underground repairs	Sanco Pipelines After hours emergencies	408-377-2793 408-640-1938 or 408-358-3655
9. Equipment Rental	United rentals 24/7 service	408-251-7730 800-877-3687
10. Hydro Flusher	Abel Sewer & Drain	408-377-9990
11. Diesel repair	Peterson Cat	510-618-5575
12. Waste oil	Golden state environmental	408-687-6780
13. Street lights/ Signals	Cal-West Craig Geis	408-640-7796

Emergency Contacts :Other Agencies

PG&E 1-800-743-5000

High Priority 1-888-743-4911

AT&T 1-800-247-2020

SFPUC 1-650-872-5900

Mike Wiesenberger 1-650-872-5918

SCVWD 1-408-565-2607

John Cook 1-408-630-2501

Inter-Tie 1-408-586-0098

DWR (South Bay Aqueduct) 1-209-833-2180

SJWPCP (Treatment Plant) 1-408-877-4070

1-408-635-4000

On duty Supervisor cell 1-408-945-5317

UPRR 1-888-877-7267

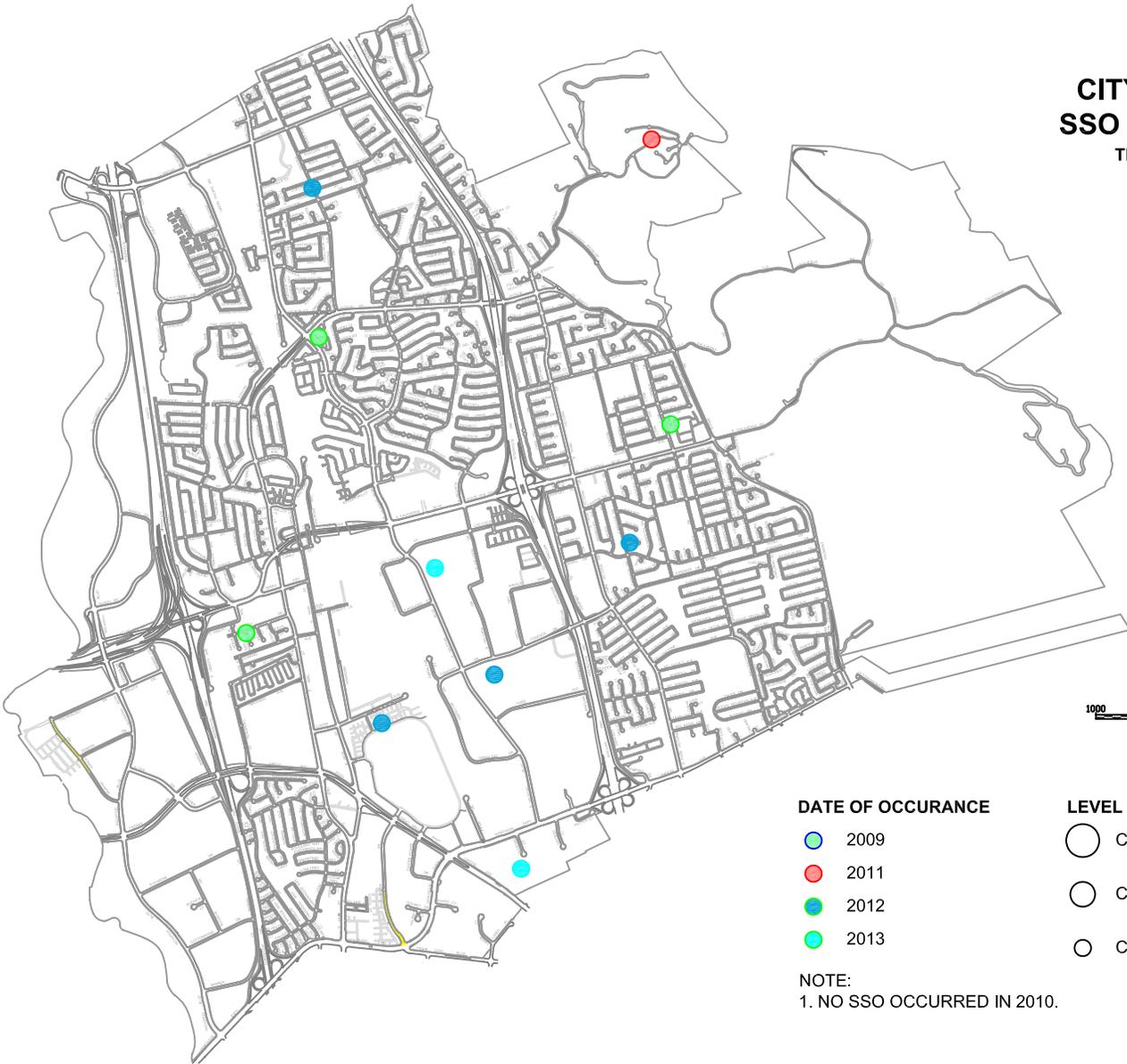
USA Locate 811

VTA (Bus Route interruption) 1-408-321-2300

Appendix O

SSO Map Location

CITY OF MILPITAS SSO LOCATION MAP THROUGH JULY 2014



DATE OF OCCURANCE

- 2009
- 2011
- 2012
- 2013

LEVEL OF SSO

- Category I - Reached surface water
- Category II - 1000+ gallons, did not reach surface water
- Category III - All others

NOTE:
1. NO SSO OCCURRED IN 2010.

Appendix P

Preventative Maintenance Log

<u>Weekly Trouble Areas</u>	<u>Direction</u>	<u>Footage</u>
Sunnyhills CT	SE	250
Cortez & Coelho	N	350
Corinthia DR	E	350
Poppy LN	S	250
Edsel & Monmouth DR	N	300
Milpitas BLVD (siphon)	S	150 X 3
Spence & Whittier	S	400
Barker & Norwich	S	350
Barker & Norwich	E	300
Abel & Corning	W	500
Montague EXPWY	S	600
Barber & Bellew	N	350
369 San Petra	N	280'

March & Sept. Trouble area's

Direction

Footage

Canton & Bixby	N,S,E	300 each direction
Calaveras & Hillview	N	300
Valencia & Terra Bella	N,S,E	300 each direction
Erie Cir & Superior	N,W	200 each direction
Arizona Ave	N, S	200 each direction
Heath & Chestnut	N, E	250 EAST,525 NORTH
S. Main St. Siphon	S	150
Gill Park Siphon	E	150

SANTA RITA @ ANGUS

365 Roswell	E	350 TO TENNIS COURTS @ GILL PARK
Jacklin rd.	N	300' to Ashland
Erie circle & Trammway	E	south bound 680 offramp to golfland
1425 Saturn Ct.	S	400' South of Erie Cicle
Capital & Venus	E	275' to end of Saturn ct.
Dixon & Conway	W, E	W 100' & E ' 150' to Stardust
	E, N	Both holes, North of school, and just W. of Conway

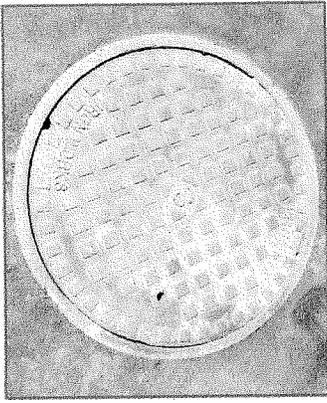
December-June

Location	Direction	Notes
Sequoia @ Yosemite	S,E	S 250', E 350'
Roswell @ Edsel	N, S, E	N 350' S 250' E 300'
Carnegie @ Edsel	E, S	E 200' S 550'
N Gadsen @ Adams	N, E	N 300 E 350'
196 Selwyn	E	E 320' to Parkvictoria
East bound Calv. @ N. 680		N 475' to ayer st.
Russell @ Hillview	W, N	W 450' N 350'
Vienna @ Fountain Blue		N 300' E 500'
Conway @ Coelho	N, E	N 300' E 200'
Conway @ Greathouse		E 350' S 375'
1886 N Milpitas Blvd.	E	E 600'
Chestnut @ Larch	N, S, E	N 250' S 250' E 450'
Casper @ Spence	W, E	W 450' E 300'
1357 Moonlight Circle	E, S	E 210'
1317 Moonlight Way	S	S 350'
Moonlight Circle @ Stardust		S 370' W 225'
Capitol @ Stardust	W, S	W 300' S 1150'
Capitol @ Sunrise	S, E	S 450' E 400'
N.E. corner S. Main @ Greatmall		S 200' E 100'
Curtis E. of Main	E	E100' toward Hammond
400 Montague	W	W 250'
Conway @ Dixon	S, E,	S 200' E 250'
Louise ct. Wylie	S	S 150' Louise ct.
Calaveras Blvd.	S	S 250' Jupiter ct.

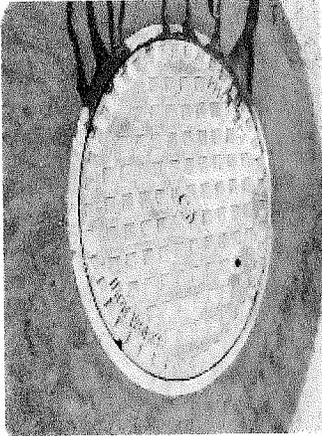
Appendix Q

Flowrate Chart

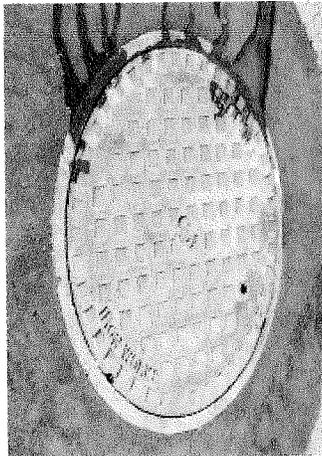
26 1/2" "A" Manhole, Page 1 of 2



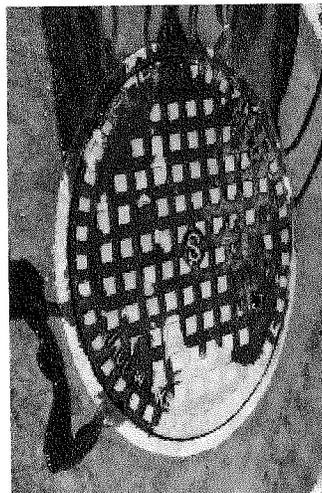
26 1/2" Manhole



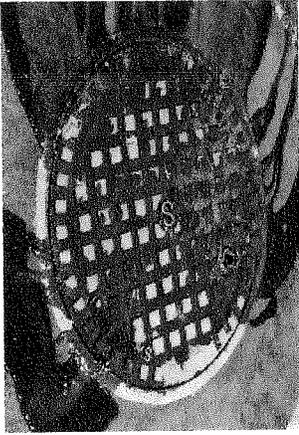
1 GPM



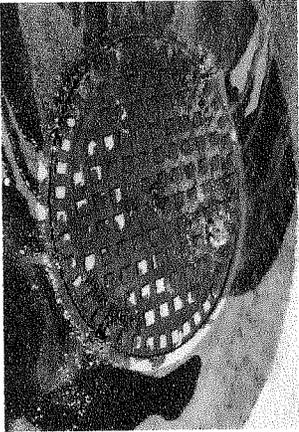
2 GPM



5 GPM



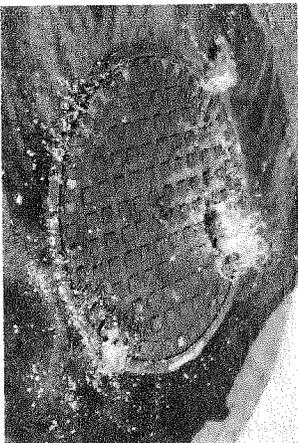
10 GPM



15 GPM



20 GPM

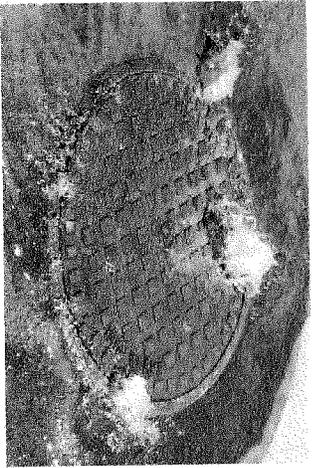


25 GPM

Instructions: Since Milpitas has several different sizes of manhole lids varying in weight and number of pick holes, it is important to follow these steps when using this SSO flow rate estimating tool:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Measure lid diameter and select the correct chart to use. There are 4 different charts, one for each diameter. If you have a lid that is an odd size or does not match one of the charts, ask a coach for help. If the lid is stuck to the casting or any of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture.
- 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.

26 1/2" "A" Manhole, Page 2 of 2



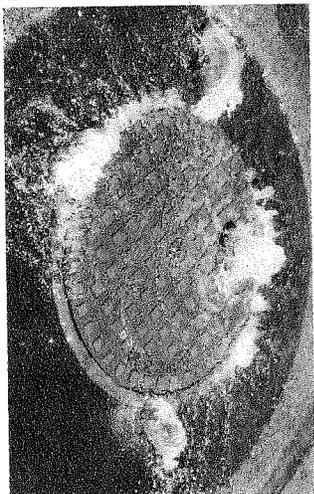
30 GPM



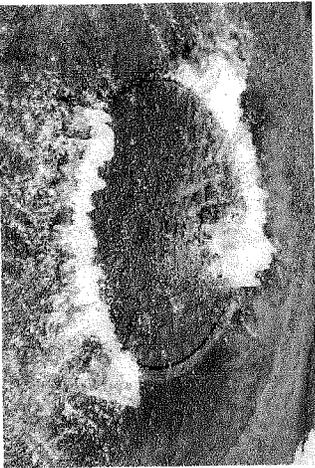
50 GPM



75 GPM



100 GPM



125 GPM



150 GPM



175 GPM



200 GPM

Instructions: Since Milpitas has several different sizes of manhole lids varying in weight and number of pick holes, it is important to follow these steps when using this SSO flow rate estimating tool:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Measure lid diameter and select the correct chart to use. There are 4 different charts, one for each diameter. If you have a lid that is an odd size or does not match one of the charts, ask a coach for help. If the lid is stuck to the casting or any of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture.
- 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.

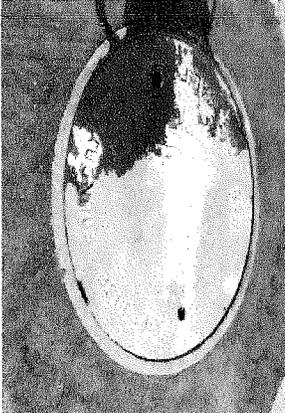
26 1/2" "B" Manhole, Page 1 of 2



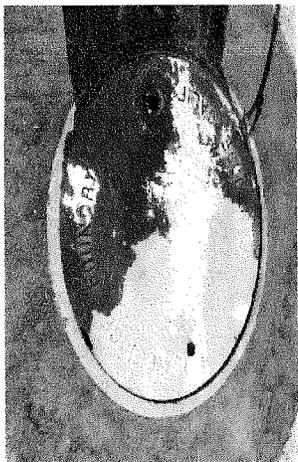
26 1/2" Manhole



1 GPM



2 GPM



5 GPM



10 GPM



15 GPM



20 GPM



25 GPM

Instructions: Since Mlptitas has several different sizes of manhole lids varying in weight and number of pick holes, it is important to follow these steps when using this SSO flow rate estimating tool:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Measure lid diameter and select the correct chart to use. There are 4 different charts, one for each diameter. If you have a lid that is an odd size or does not match one of the charts, ask a coach for help. If the lid is stuck to the casting or any of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture.
- 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.

26 1/2" "B" Manhole, Page 2 of 2



30 GPM



50 GPM



75 GPM



100 GPM



125 GPM



150 GPM



175 GPM

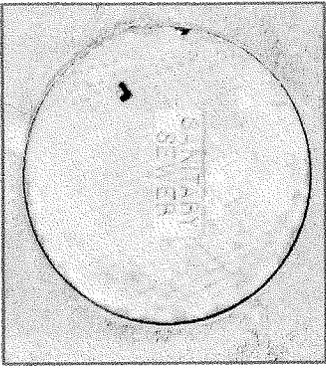


200 GPM

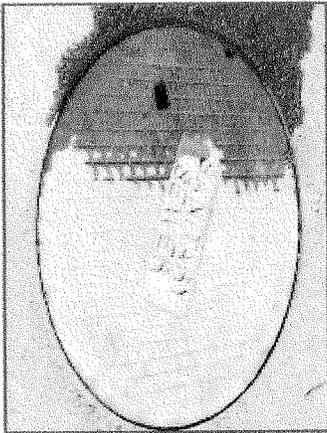
Instructions: Since Milpitas has several different sizes of manhole lids varying in weight and number of pick holes, it is important to follow these steps when using this SSO flow rate estimating tool:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Measure lid diameter and select the correct chart to use. There are 4 different charts, one for each diameter. If you have a lid that is an odd size or does not match one of the charts, ask a coach for help. If the lid is stuck to the casting or any of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture.
- 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.

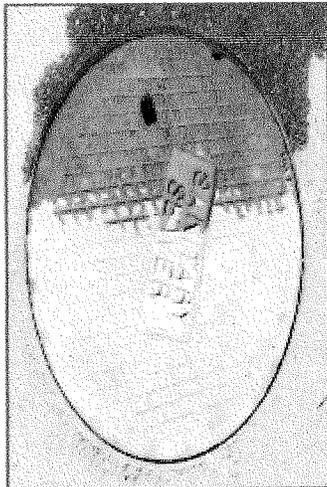
24" Manhole, Page 1 of 2



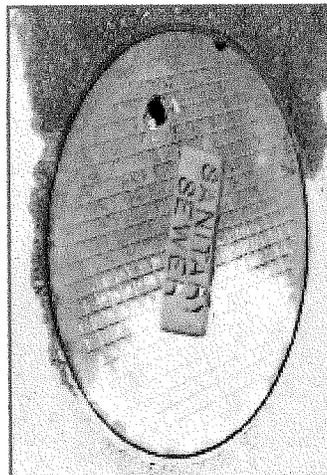
16 3/8" Riser



1 GPM



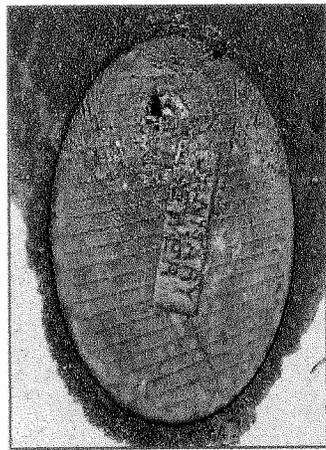
2 GPM



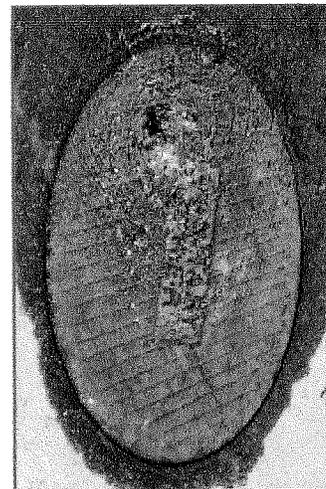
5 GPM



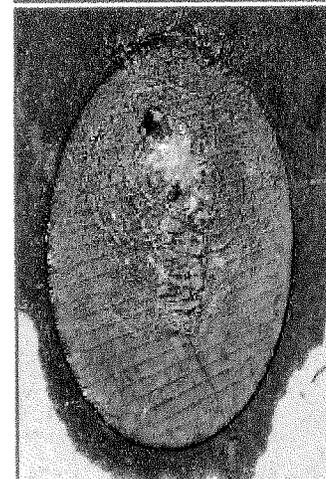
10 GPM



15 GPM



20 GPM



25 GPM

Instructions: Since Milpitas has several different sizes of manhole lids varying in weight and number of pick holes, it is important to follow these steps when using this SSO flow rate estimating tool:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Measure lid diameter and select the correct chart to use. There are 4 different charts, one for each diameter. If you have a lid that is an odd size or does not match one of the charts, ask a coach for help. If the lid is stuck to the casting or any of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture.
- 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.

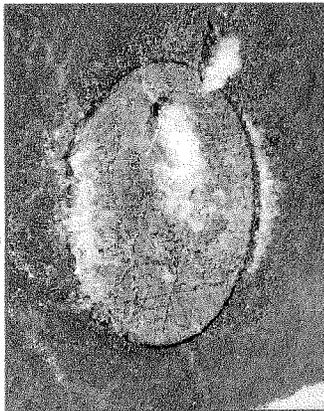
24" Manhole, Page 2 of 2



30 GPM



50 GPM



75 GPM



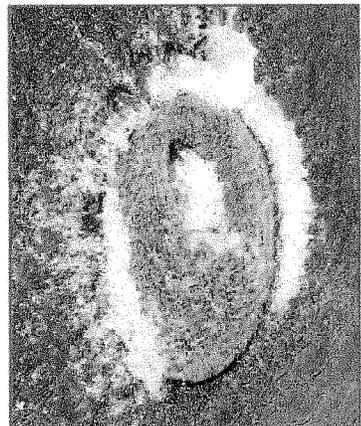
100 GPM



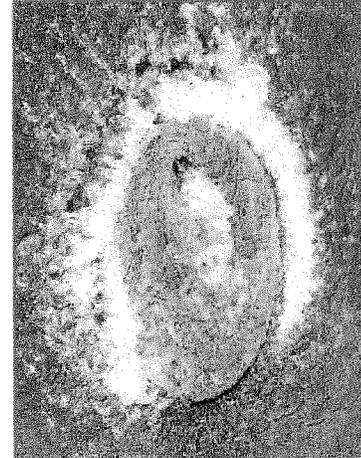
125 GPM



150 GPM



175 GPM



200 GPM

Instructions: Since Millpitas has several different sizes of manhole lids varying in weight and number of pick holes, it is important to follow these steps when using this SSO flow rate estimating tool:

- 1) If you are able, take a picture of overflowing manhole/riser.
- 2) Measure lid diameter and select the correct chart to use. There are 4 different charts, one for each diameter. If you have a lid that is an odd size or does not match one of the charts, ask a coach for help. If the lid is stuck to the casting or any of the vent holes are plugged, make a note of that on the SSO estimation worksheet and take a picture.
- 3) Match overflowing lid to the closest picture on the correct chart, and use that as the rate of flow on the SSO estimation worksheet.