Almonte Sanitary District
Sewer System Management Plan

Originally Adopted by the ALMONTE Board of Directors on 08/28/06
Last Readopted 11/16/20

EXECUTIVE SUMMARY

This Sewer System Management Plan (SSMP) has been prepared in compliance with the requirements of the San Francisco Bay Regional Water Quality Control Board (RWQCB) pursuant to Section 13267 of the California Water Code, and the State Water Resources Control Board (SWRCB) Order No. 2006-0003-DWQ, and Amended Monitoring and Reporting Program (MRP), Order No. WQ 2013-0058-EXEC.

ES-1 Background

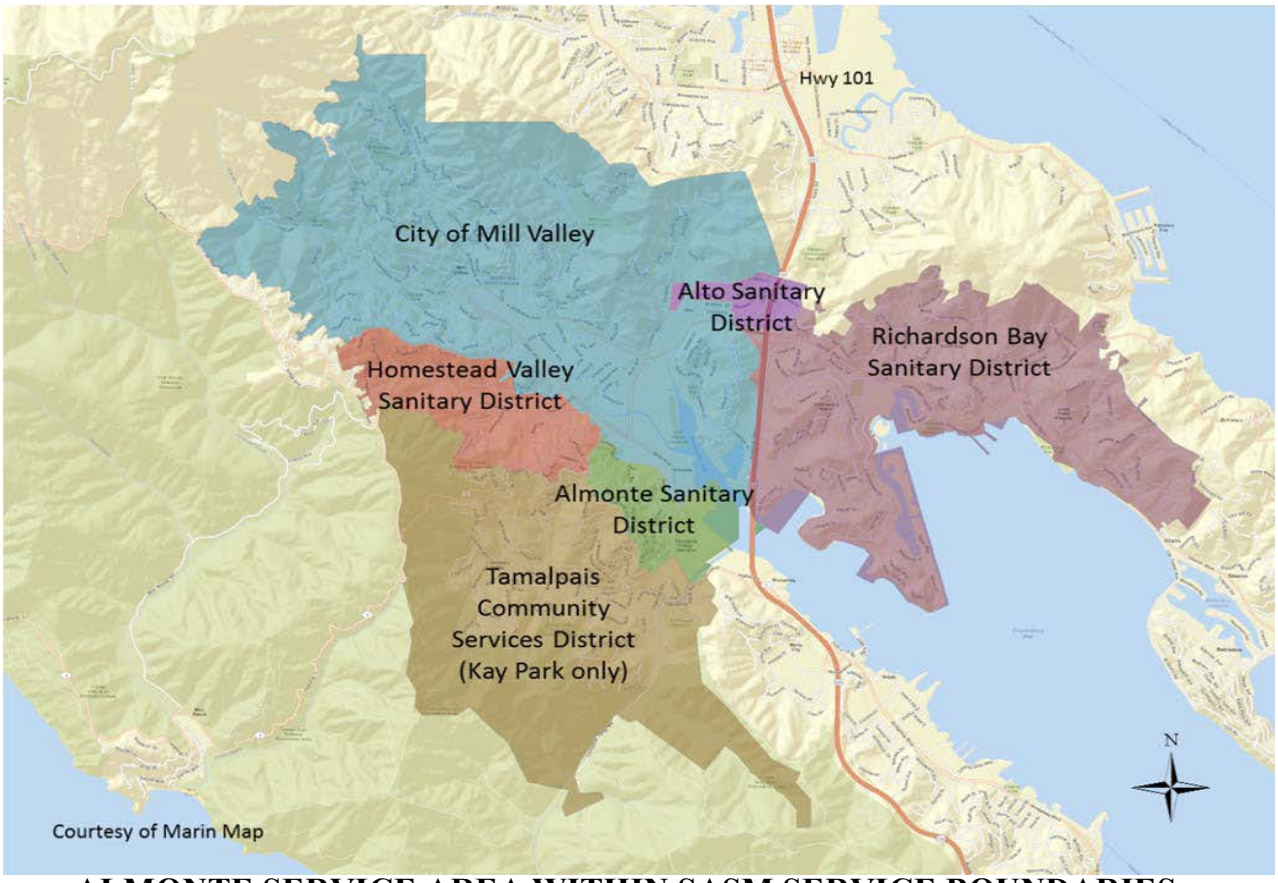
On July 7, 2005, the RWQCB issued a letter to the San Francisco Bay Region (Region 2) sewer collection system agencies that required the agencies to prepare an SSMP. At the same time, the RWQCB released an SSMP Development Guide that was prepared in cooperation with the Bay Area Clean Water Agencies (BACWA). The 2005 directive stated that Almonte must also comply with RWQCB sanitary sewer overflow (SSO) electronic reporting requirements issued in November 2004.

Similarly, on May 2, 2006, the State Water Resources Control Board (SWRCB) issued a directive through Order No. 2006-0003-DWQ to require all public wastewater collection system agencies in California with greater than one mile of sewers to be regulated under General Waste Discharge Requirements (Statewide WDR). Portions of this Order related to monitoring and reporting were amended by Order No. 2013-0058-EXEC, dated July 30, 2013. The SWRCB SSMP requirements are similar to those of the RWQCB but differ in organization and some details.

The intent of this SSMP is to meet the requirements of both the RWQCB and the Statewide WDR. The organization of this document follows the requirements of the Statewide WDR. The District's waste discharger identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 2SSO10089.

ES-2 Almonte Sanitary District Service Area

Almonte Sanitary District (Almonte or District) provides wastewater collection service to the unincorporated area of southern Marin bordered by the City of Mill Valley, Homestead Valley Sanitary District and Tamalpais Community Services District. The District serves over approximately 685 households a small number of businesses and has been servicing the area since 1949. District flows are conveyed to the Sewerage Agency of Southern Marin (SASM) wastewater treatment plant in Mill Valley. SASM was formed under the Exercise of Joint Powers Act, and also includes Alto, Homestead Valley and Richardson Bay Sanitary Districts, and a portion of Tamalpais Community Services District, and the City of Mill Valley. Figure ES-1 shows the District's service area, and its relationship to SASM and the other SASM member agencies.



ALMONTE SERVICE AREA WITHIN SASM SERVICE BOUNDARIES

ES-3 SSMP Objectives

The objectives of the SSMP are to accomplish the following:

1. Establish goals that align the Almonte sewer collection system operation, management and capacity assurance activities in a manner that achieves the goals stated in Element 1.
2. Comply with the RWQCB SSMP Development guidelines and Statewide WDR through provision of the following:

   - Elements I through XI, following the outline of the Statewide WDR, including a description of the regulatory requirements and a summary of existing and planned documents and plans related to each element.
   - Appendices that are amended over time to reflect changes in contact personnel, job descriptions, policies, procedures and programs.

Table ES-1 identifies the objectives that must be addressed to comply with each SSMP element.

Table ES-1, SSMP Objectives

ELEMENT	OBJECTIVE
Goals	• Properly manage, operate, and maintain the collection system • Provide capacity to convey base and peak flows • Minimize the frequency and severity of SSOs • Mitigate the impact of SSOs
Organization	• Identify agency staff responsible for the SSMP • Identify chain of communication for responding to and reporting SSOs
Sanitary Sewer Overflow Response Plan (SSORP)	• Provide SSA notification procedures • Develop and implement a plan to respond to SSOs • Develop procedures to report and notify SSOs • Develop procedures to prevent overflows from reaching surface waters and to minimize or correct any adverse impacts from SSOs
FOG Control Program	• Develop a Fats, Oil and Grease (FOG) control plan, if needed
Legal Authority	• Control I/I from the collection system and laterals • Require proper design and construction of sewers and connections • Require proper sewer installation, testing and inspection • Have the authority to impose source control requirements
Monitoring, Measurement, and Program Modifications	• Measure the effectiveness of each SSMP element • Monitor each SSMP element and make updates as necessary
Design & Construction Standards	• Identify minimum design and construction standards and specifications • Identify procedures and standards for inspecting and testing
System Evaluation and Capacity Assurance	• Establish a process to access current and future capacity requirements • Implement a capital improvement plan to provide hydraulic capacity
Operation and Maintenance Program	• Maintain up-to-date maps • Allocate adequate resources for system operation and maintenance • Prioritize preventative maintenance activities • Identify critical equipment and spare parts to minimize equipment and/or facility downtime • Provide staff training on a regular basis
SSMP Audits	• Conduct a bi-annual audit that includes deficiencies and identify steps to correct them
Communication Program	• Communicate with the public on SSMP development, implementation and performance. Create a plan for communication with tributary/satellite sewer systems if applicable

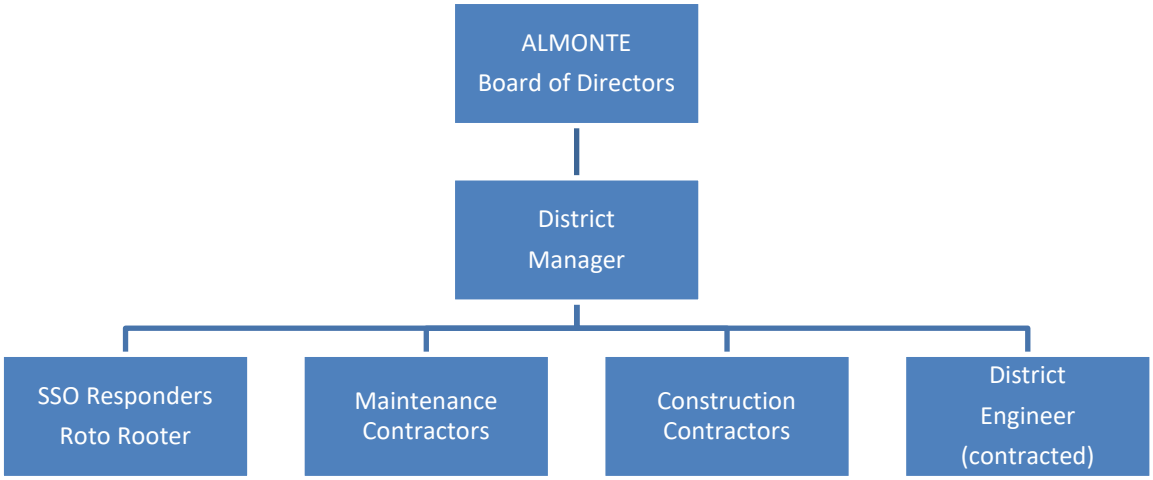
ELEMENT 1
GOALS

The goals of the District are to accomplish the following:

- To properly manage, operate, and maintain all parts of the wastewater collection system, so as to preserve and protect the public's investment in that system
- To provide adequate capacity to convey peak flows to the WWTP
- To minimize the frequency and duration of SSOs, including implementing regular, proactive maintenance of the system to remove issues that may cause sewer backups or SSOs
- To mitigate the impact of SSOs on public health and the environment
- To respond quickly and respectfully to public notifications of SSOs or other collection system issues
- To collect complete and accurate information regarding SSOs for reporting to the appropriate regulatory agencies
- To uphold the District’s standards and specifications on newly constructed public and private sewers
- To provide a safe working environment for District employees
- To provide District employees with the tools and training needed to perform their work effectively and achieve the District goals

ELEMENT 2
ORGANIZATION

Figure 2.1
Almonte Organization Chart



ALMONTE Board of Directors: Adopts SSMP plan and policy. Approves budget to implement SSMP.

District Manager: Overall responsibility for preparing and implementing the SSMP. Directs SSO response personnel. Monitors SSMP budget and performance. Directs contractor activities in making capital improvements. Directs contractor activities in cleaning and television inspection of the sewer system. Manages sewer overflow response. Prepares and submits reports. Writes annual work plan for maintaining, inspecting and improving the sewer system. Regulatory Agency liaison.

SSO Responders (Roto Rooter, District Manager, other contractors): Performs SSO response activities.

Maintenance Contractors (Roto Rooter). Performs SSO response activities. Conduct sewer cleaning and televising activities.

Construction Contractors: Construct sewer system improvements.

Table 2.1

SSMP Responsibilities

ELEMENT	Responsible Positions
I Goals	• The District Manager leads staff in the implementation of the District's goals.
II Organization	• The District Manager updates the organizational structure, manages SSMP implementation assignments, and amends SSO response and reporting chains of communication, as needed.
III Legal Authority	• The District Counsel (employed by Marin County) upholds the District Ordinance and drafts new ordinances as needed.
IV Operation and Maintenance Program	• The District Manager manages the District's resources and budget, and completes outreach to building contractors, plumbers and District contractors. • The District Manager manages preventive maintenance, contingency equipment and replacement inventories, training, collection system map, project inspections, and condition assessments. • Emergency response, USA locates, and annual cleaning is performed by RotoRooter of Marin
V Design & Construction Standards	• The District Engineer reviews design and construction documents to ensure that all construction projects meet the District's standards. The District Engineer also updates standards for installation, rehabilitation and repair, as needed. The District Manager provides inspection services to ensure the District's construction standards have been followed.
VI Sanitary Sewer Overflow Response Plan (SSORP)	• The District Manager oversees implementation of the SSORP by the Maintenance Contractor (RotoRooter of Marin) and other contractors as necessary, makes revisions to the plan, and conducts/attends regular training.
VII FOG Control Program	• The District Manager develop a Fats, Oil and Grease (FOG) control plan, if needed. The Maintenance Contractor identifies District sewers where grease may be a problem.
VIII System Evaluation and Capacity Assurance	• The District Manager establishes and assesses capacity requirements for the collection system and manages implementation of the Capacity Assurance section of the Sewer System Response Action Plan. The District Manager also updates CIP budgets and schedules for projects to address capacity needs.
IX Monitoring, Measurement, and Program Modifications	• The District Manager monitors implementation and assess success of the SSMP program elements, including identifying trends in SSOs, and reporting progress to the District Board.
X SSMP Audits	• The District Manager conducts a bi-annual audit that includes deficiencies and identifies steps to correct them
XI Communication Program	• The District Manager and Board of Directors communicate with the public and nearby agencies on the SSMP.

Names and telephone numbers for all responsible ALMONTE personnel are contained in Appendix 2 and 3 of the "Sanitary Sewer Overflow Response Plan (SSROP)" which is Appendix A of this document

In accordance with the "Sanitary Sewer Overflow Response Plan (SSROP)" (Appendix A of this document), all SSO's are immediately reported to the District Manager. It is the District Manager's responsibility to report all SSOs to the Marin County Department of Health Services, the Regional Water Quality Control Board, the State Water Resources Control Board, the State Office of Emergency Services, and the California Department of Fish and Game (if applicable). Pertinent phone numbers are:

Office of Emergency Services: (800) 852-7550

District Manager: (415) 388-8775

Contract Responder – Roto Rooter: (415) 388-2740 or (415) 898-6074

Agencies:

- California Regional Water Quality Control Board: (510) 622-2369
- California Department of Fish and Game: (707) 944-5500
- County Environmental Health Services: (650) 473-6907
- California Office of Emergency Services: (800) 852-7550
- U.S. Coast Guard : (415) 399-3530

ELEMENT 3
LEGAL AUTHORITY

Legal Authority for the management of ALMONTE's collection system is provided by the District's Ordinance No. 19, No. 31and No. 2011-01(Adopted September 28, 1970, July 22, 1985 and July 25, 2011, respectively) in conjunction with the Sewerage Agency of Southern Marin (SASM) Ordinance No. 83-1 which pertains to the collection systems of SASM's member agencies, including ALMONTE. (See Appendix B)

a. Authority to control inflow and infiltration:

ALMONTE SEWER ORDINANCE NO. 31 provides authority for the District to regulate the proper construction and use of private and public sewer within the District. The ordinance prohibits the connection of surface drains for storm or ground water to District sewers. Also, no surface or storm water, seepage or unpolluted water from any source shall be permitted to enter into a sanitary sewer by any means.

SASM Ordinance No. 83-1 was adopted by the SASM Board of Directors on April 21, 1983. Section 2.01 (k) of this ordinance states that "No individual, company, or government agency shall discharge sewage to a sewer owned and operated by an Agency tributary to a treatment works operated by SASM which causes SASM's interceptor sewers and sewage collection systems to be overloaded". This provision grants SASM legal authority to control excessive infiltration and inflow into the SASM sewer system. Ordinance 83-1 also prohibits the discharge of any stormwater, groundwater and/or unpolluted water into the SASM sewer system.

b. Authority to prohibit the discharge of fats, oils and grease and other debris that might cause blockages

ALMONTE Ordinance No. 19 limits the introduction of fats, oils and grease as well as debris that might cause blockages.

Section 2.01 (b) of SASM Ordinance No. 83-1 states that "No individual, company, or government agency shall discharge sewage to a sewer owned and operated by an Agency tributary to a treatment works operated by SASM which causes an obstruction to the treatment works (which by definition includes the sanitary sewer collection system)." In addition, Section 2.08.2 of Ordinance No. 83-1 states that "No person shall discharge any wastewater containing more than 300 mg/l of oil or grease of animal or vegetable origin or containing more than 100 mg/l of oil or grease of mineral or petroleum origin.

c. Authority to require proper design and construction of new and rehabilitated sewers and connections:

ALMONTE Ordinance No. 31 requires compliance with District regulations and the requirement to obtain a permit to construct sewers within the District.

d. Authority to require proper installation, testing, and inspection of new and rehabilitated sewers

Almonte Ordinance No. 31 requires inspection and approval by the District engineer of all sewers and that workmanship and materials shall be in accordance with the applicable sections of the Uniform Plumbing Code and the District's standards for sewer construction.

e. Authority to enforce

Ordinance No. 19, No. 31and No. 2011-01 provides for enforcement for any violation of the Ordinance.

f. Authority to access ALMONTE sewers for maintenance, inspection, and repairs

All ALMONTE sewers are in public right-of-ways or in ALMONTE easements that allow ALMONTE access for maintenance, inspection, and repair.

ELEMENT 4
OPERATIONS AND MAINTENANCE PROGRAM

a. Collection system map

ALMONTE, via its contracted District engineering firm, maintains an up-to-date map and database inventory of its wastewater collection system. The map shows all gravity line segments and maintenance holes. The District does not own pumping facilities or pressure pipes.

b. Resources and budget

ALMONTE allocates adequate resources for the operation, maintenance, and repair of its collection system. ALMONTE's operating and capital revenues are derived from a user's fee assessed through the County to all Almonte residences. A small portion of the District's revenues also come from property taxes and miscellaneous county funds.

c. Prioritized preventive maintenance

ALMONTE has an aggressive preventative maintenance program. The District is currently cleaning its non plastic sewers every year by rodding and its newly replaced HDPE lines every 3 years by hydro-flushing. The District also does increased preventive maintenance on troublesome sewer sections, with semiannual or quarterly maintenance. At this update, due in part to the current cleaning strategy, the District has not had an SSO since December 2018.

The District preventive maintenance and cleaning programs are based in an SSGIS computer based system.

d. Scheduled inspections and condition assessment

Because of the frequency of the ALMONTE cleaning program, problems are normally identified in the course of normal preventive maintenance and are dealt with on an as-needed basis through spot repairs or larger replacement projects.

Additionally, ALMONTE's complete system was televised in 2009-2010. The resultant structural ratings by segment guide the selection of potential segments for the annual CIP replacement program. Retelevising of potential pipe segments is done as part of the engineering process for each year's CIP. Each CIP includes televising of all connected laterals.

e. Contingency equipment and replacement inventories

ALMONTE currently conducts all sewer system maintenance, cleaning, inspection, and repair using contract services provided by Roto Rooter of Marin or by engineering contractors specializing in sewer rehabilitation. ALMONTE therefore does not maintain an inventory of contingency equipment or replacement parts.

f. Training

ALMONTE has a limited staff consisting of one part-time manager and an assistant manager who has extensive experience in wastewater treatment and collection system operation. Staff is responsible for inspection of collection system repairs in conjunction with the District Engineer. ALMONTE currently conducts all sewer system maintenance, cleaning, repair and replacement using contract services. ALMONTE staff is responsible for ensuring that contractors comply with Cal OSHA requirements.

ALMONTE staff is also responsible for emergency response to Sewer System Overflows. In accordance with ALMONTE's "Sanitary Sewer Overflow Response Plan" (SSORP), SSO response training is required and conducted annually.

g. Outreach to plumbers and building contractors

ALMONTE is prepared to participate in a region-wide outreach program.

ELEMENT 5
DESIGN AND CONSTRUCTION STANDARDS

On an as-needed basis, ALMONTE uses the services of registered engineers when installation, rehabilitation, and/or repairs of the ALMONTE collection system are required. The following plans apply to sanitary sewer collection systems and not to pump stations.

a. Standards for installation, rehabilitation and repair

ALMONTE utilizes standards for installation, rehabilitation and repair of District sewers as provided for in the design and construction standards provided by the District engineer. (See Appendix C)

b. **Standards for inspection and testing of new and rehabilitated facilities**

ALMONTE utilizes procedures as outlined in the District's design and construction standards.

ELEMENT 6
Overflow Emergency Response Plan

ALMONTE's detailed "Sanitary Sewer Overflow Response Plan (SSORP)" is Appendix A of this document.

For reference, the Table of Contents of the SSORP is presented below.

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ELEMENT 7
FATS, OILS. AND GREASE (FOG) CONTROL PROGRAM

ALMONTE Ordinance No. 19 in conjunction with the Sewerage Agency of Southern Marin (SASM) Ordinance No. 83-1 provides authority to limit the quantity of grease that may be introduced into the drainage or sewerage system in quantities that can cause line stoppage or hinder sewage treatment or private sewage disposal. A grease trap is not required for individual dwelling units or for any private living quarters.

In March 2015, ALMONTE entered into a FOG Source Control Program Agreement with Central Marin Sanitation Agency (CSMA) to implement a FOG Control Program including issuing Food Service Establishments (FSEs) FOG permits, performing field inspections, and providing program administration (maintaining databases, necessary enforcement actions, etc.)

Currently, ALMONTE is requiring the installation and maintenance of a grease trap at two FSEs, (one existing and one new). that connect directly to the District's sewer system. The sewer line to which these FSEs connect is receiving prioritized quarterly preventative maintenance to prevent overflows due to any grease accumulation.

ELEMENT 8
SYSTEM EVALUATION AND CAPACITY ASSURANCE

a. Capacity assessment

The ALMONTE collection system is designed to handle extreme wet weather flows due to rainwater infiltration into the sewer system. Dry weather capacity is therefore much more than adequate under all circumstances. Since Almonte is nearly completely built out, future dry weather flow increases of more than 1% will not occur and current capacity will remain more than adequate.

Almonte participates with SASM in system wide flow monitoring and modeling, with the latest evaluation being done during the winter of 2019-2020. Also, wet weather capacity limitations have been identified through simple observation of collection system conditions when extreme, prolonged wet weather conditions prevail.

b. System evaluation and capacity assurance plan

Annual CIPs are prepared and implemented to insure that the hydraulic capacity of all sewer system elements under peak flow conditions is maintained.

ELEMENT 9
MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

Any SSO that occurs at any time will trigger an investigation by the District Manager. The cause of the SSO will be determined and the SSMP will be modified by the District Manager to minimize the likelihood that an SSO does not reoccur in the same location for the same reason.

All SSO's will be reported to the ALMONTE Board of Directors; to the San Francisco Regional Water Quality Control Board via CIWQS in accordance with reporting standards adopted by the Regional Board in November, 2004; and to the State Board pursuant to WDR . The annual report format is designed to identify and illustrate trends including frequency, location and volume.

ELEMENT 10
SSMP AUDITS

The District Manager is responsible for monitoring the effective and complete implementation of the SSMP. The District Manager will prepare and file a written point by point compliance review of the SSMP bi-annually. Any deficiencies in implementation will be corrected. This audit will focus on evaluating the effectiveness of the SSMP and compliance with State and regional SSMP requirements.

ELEMENT 11
COMMUNICATIONS PROGRAM

The completed SSMP and modifications thereto are and will be presented in public session to the ALMONTE Board of Directors for discussion, modification, and adoption. In addition, all SSOs are and will be reported to the ALMONTE Board of Directors in public session.

Appendix A

Almonte Sanitary District

Sanitary Sewer Overflow Response Plan

(SSORP)

Revised: August 2009, May 2014, Nov 2020

Original: October 2008

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List of Abbreviations

CCTV	Closed-Circuit Television
CDFG	California Department of Fish and Game
CIWQS	California Integrated Water Quality System
District	Almonte Sanitary District
EHS	County of Marin Environmental Health Services
EPA	Environmental Protection Agency
Field Report	Sanitary Sewer Overflow Service Call & Field Report Form
GWDR	General Waste Discharge Requirement
LRO	Legally Responsible Officer
MMS	Maintenance Management System
MRP	Monitoring and Reporting Form
O&M	Operations and Maintenance
RWQCB	Regional Water Quality Control Board
SOP	Standard Operating Procedure
SSO	Sanitary Sewer Overflow
SSORP	Sanitary Sewer Overflow Response Plan
SWRCB	State Water Resources Control Board

Chapter 1 Introduction

The purpose of the Sanitary Sewer Overflow Response Plan (SSORP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The SSORP provides guidelines for responding to, cleaning up, and reporting SSOs that may occur within the collection system service area.

1.1 Regulatory Requirements

The section summarizes the regulatory requirements for the SSORP.

1.1.1 EPA Administrative Order Requirements

This Sanitary Sewer Overflow Response Plan addresses the requirements of Section II of the EPA Amended Order for Compliance, Docket No. CWA-309(a)-08-030, dated September 2, 2008 which includes the following requirements:

II. Sanitary Sewer Overflow Response Plan

A. By October 15th, 2008, an SSORP shall be submitted to EPA. An SSORP shall describe emergency response and contingency procedures to address SSOs from its collection system, including measures for containing and recovering spilled sewage, establishment of interim system operations, and timely repair and restoration of normal operations. Each agency shall ensure that agency staff and responders are adequately trained to perform the procedure outlined in the SSO response plan. The plan shall include:

i. Procedures to notify the responders during normal business hours and after business hours. A responder should be at the SSO spill location and initiating response activities within 60 minutes after the agency becomes aware of the spill. If the responder cannot be at the spill location within 60 minutes, the agency shall report the late response as part of the quarterly spill report required. The agency will include in the quarterly spill report a description of all late responses, reasons for each late response, and steps that will be taken to improve the response time.

ii. Procedures to ensure containment, termination, maximum recovery, and cleanup of spilled sewage. These procedures shall prevent spills from reaching storm drains and surface water, and mitigate the impact of spills that reach storm drains and surface water.

iii. Procedure to estimate volume. The procedures should include more than one estimation method that can be used for different spill scenarios.

iv. Procedures to secure the area surrounding a spill and post warning signs as necessary in coordination with the County of Marin's Department of Health and Human Services;

v. Procedures to sample and monitor surface waters following spills.

vi. A list of necessary spare parts and emergency equipment to ensure adequate response time and maximum recovery of spilled sewage.

vii. A description of staffing needs required to respond to SSOs and whether staffing duties will be carried out by agency staff, staff from other agencies, or private contractor(s). To the extent that any SSO response duties will be carried out by private contractor(s), the plan shall describe the contractor and include copies of the contracts obligating the contractor(s) to fulfill the requirements of the SSO response plan implemented pursuant to this Order.

B. Recordkeeping: The response plan developed shall include procedures for agency staff or its contractors to maintain records of spill incidents, including field reports that provide adequate information to meet reporting requirements to regulatory agencies, and procedures to link these records to the Maintenance Management System.

C. Notification: The response plan developed shall include procedures for notifying the public, including schools and recreational clubs, which may be affected by the spill. The plan should include procedures for advising the public to avoid contact and to take steps, as appropriate, in cases of contact with spilled sewage. For spills in homes and businesses, the plan should include procedures for cleaning the spill area. The plan shall identify the agency staff person(s) responsible for public notification.

D. Reporting: The response plan shall include procedures for reporting spills, as required, to the appropriate regulatory agencies, including the Regional Board, State Water Resources Control Board, the State of California's Office of Emergency Services, and the County of Marin's Department of Health and Human Services. The plan shall identify the agency staff person(s) responsible for reporting sewage spills.

1.1.2 GWDR Requirements

The Statewide General Waste Discharge Requirements (GWDR) for Sanitary Sewer System was adopted by the State Water Resources Control Board of California (SWRCB) on May 2, 2006. The goal of the GWDR is to provide a consistent statewide approach for reducing SSOs. The GWDR outlines requirements for all publicly owned sanitary sewer collection systems in California with more than one mile of sewer pipe. Per the GWDR, 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 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.

1.2 Goals

The purpose of this SSORP is to provide Almonte Sanitary District (District) personnel with established guidelines for responding to sewer spills which may occur within the collection system service area. The goals with respect to responding to SSOs are:

- Respondquickly 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.

1.3 Definitions

Minor Sanitary Sewer Overflow (SSO): Category 3 SSO.

Major Sanitary Sewer Overflow (SSO): Category 1 SSO and Catagory 2 SSO

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.

Sanitary Sewer Overflow (SSO): An SSO includes any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundment, tanks, etc) are considered to be part of the sanitary sewer system, and discharges to these temporary storage facilities are not considered to be SSOs.

The responsibilities of the SSO response team depend on the volume, location, and impact of an incident. Three categories of SSOs are defined by the SWRCB.

Category 1 SSO

Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that:

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach a municipal separate storm sewer system 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 municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).

Category 2 SSO

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 municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

Category 3 SSO

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

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

1.4 SSORP Review and Updates

To coordinate with the requirements of the state's GWDR process, the District SSORP will be reviewed at least once every two years and updated if necessary.

Chapter 2 Response to Notification of Spill

The Almonte Sanitary District has adopted service call / overflow response procedures requiring immediate response to minimize or eliminate an overflow. The District contracts with an emergency response contractor that provides all necessary spill response supplies. These supplies are available for use at any time. The Overflow Response Standard Operational Procedure (SOP), included as Appendix 1, is to aid staff in prompt and responsible SSO response.

When a notification of an SSO is received, it should be clearly communicated who will respond, the estimated time of arrival, and what areas will need to be accessed. The information provided by the caller should be verified before dispatching a field crew. This includes verifying the address and nearest cross street and making sure it is part of the District's conveyance system. If not, provide the caller with the phone number of the responsible agency and follow up by calling the agency and providing the details of the call. Contact information for neighboring agencies is included in Appendix 2.

2.1 Public Observation of SSO

Public observation is the most common way that the District is notified of blockages and spills. Contact information for reporting sewer spills and backups are in the phone book and on the website: www.almontesd.org. The main telephone number is (415) 388-8775.

Almonte does not maintain regular working hours. When District staff receives a call reporting a sewer spill or backup, the staff member takes the information from the caller and fills out the first section of the Sanitary Sewer Overflow Service Call & Field Report Form (Field Report) found in Appendix 4. The person who took the call verbally communicates (do not leave a voicemail) appropriate information to the District Manager, or appropriate District personnel, along with any information collected on the Field Report. The District Manager, or appropriate District personnel, then notifies the emergency response contractor (Roto-Rooter), which responds to the incident and then files a report to the District as soon as possible.

If District staff does not take the call, the District's voicemail instructs the caller how to be directly connected to Roto-Rooter, which responds to the incident and then files a report to the District as soon as possible.

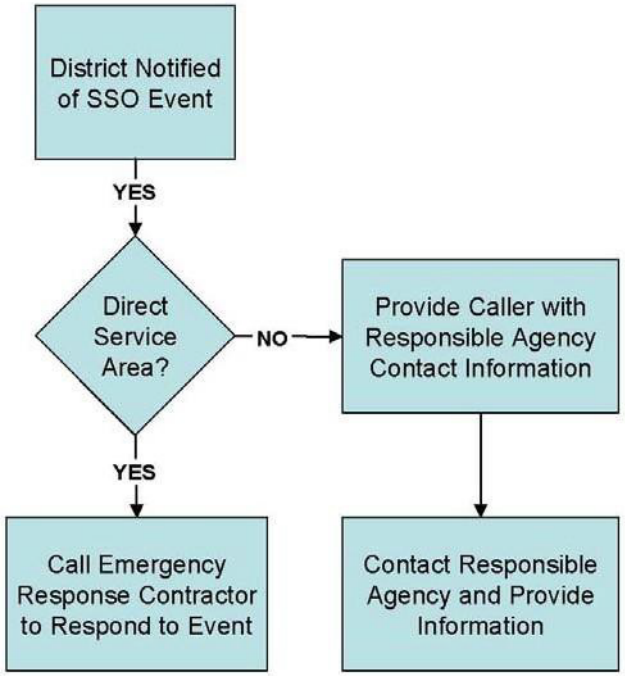
2.2 Staff Observation

District contractors perform periodic work on its sewer system facilities. Any problems noted with the sewer system facilities are reported to the District Manager who, in turn, respond to emergency situations.

2.3 Response Flow Chart

Sewer service calls are considered high priority events that demand a prompt response. The notification and response procedure flow chart is shown on **Figure 2-1**.

Figure 2-1: Notification and Response Flow Chart



2.4 Roles for Responding to SSOs

Currently, the following positions are responsible for responding to SSOs:

- First Responder to SSO: Emergency Response Contractor (Roto-Rooter)
- Claims Processing: District Manager

The contact information for those currently holding the positions named above are shown in Appendix 3.

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	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, the District will notify the California Office of Emergency Services (OES) and obtain a notification control number.	Call Cal OES at: **(800) 852-7550** County Health Officer **(415) 473-3707** and Marin County Environmental Health Services (EHS) **(415) 473-6907** are also to be contacted. During evenings/weekends, call the Sheriff Communication Center at **(415) 479-2311.**
REPORTING	• Category 1 SSO: the District will 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: the District will 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: the District will submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: the District will 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: the District will 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: the District will update and certify every 12 months	• Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.g ov/), certified by the Legally Responsible Official(s). • All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report. • Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the State SSO Program Manager must be contacted to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days.
WATER QUALITY MONITORING	• The District will 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. EHS requires daily water quality sampling until compliance is achieved, if there is a Category I discharge of 1,000 gallons or greater and spills into surface water.	Water quality results will be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING	The District will maintain the following records: • 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.

Chapter 3 SSO Response Procedures

This section describes the procedures for responding to an SSO from the time that the first responders are dispatched through containment of the spill.

3.1 Customer Relations Practices

As a representative of the District, 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 if it is perceived that staff members as being indifferent, uncaring, unresponsive, and/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. The homeowner should feel assured that the District is responsive and the homeowner's best interest is a top priority.

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 the customer exaggerating the damage done on the property.

Here are a few communication tips:

- 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.
- 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.
- Acknowledge the homeowner's concerns. For example, if the homeowner seems angry or worried about property damage, say something like, "I understand that you're concerned about the possible damage to your property, but a professional cleanup crew can restore the area."
- Express understanding and empathy for any inconveniences caused by the incident, but do not admit fault. If it is determined that the District is at fault, the property owner has the right to file a claim for any reasonable repairs or losses resulting from the incident.
- As much as possible, keep the homeowner informed on what is being done and will be done to correct the problem.
- Keep focused on getting the job done in a very professional manner. Don't wander from the problem with too much unnecessary small talk with the homeowner.
- Don't find fault or lay blame on anyone.

3.2 First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate equipment.
- To evaluate the cause of spill and determine responsibility.
- To restore the flow as soon as possible.
- To contain the spill whenever feasible.
- To minimize public access to and/or contact with the spilled sewage.

- To promptly notify the District Manager or appropriate District personnel in event of major SSO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

3.3 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. Special consideration should be given to following all local traffic, confined space, and safety procedures.

3.4 Initial Response

All sewer system calls require a response to the reported location of the event in an attempt to minimize or eliminate an overflow. The first responder must respond to the reporting party or site of the problem and initiate response activities within 60 minutes after initial reporting of the spill to the District or its emergency response contractor (Roto-Rooter). If the responder cannot be at the spill location within 60 minutes after the spill, then the late response shall be reported per the requirements in Chapter 6.

The first responder should determine appropriate response measures based on the circumstances and information provided by the caller (e.g. weather and traffic conditions, small backup vs. sewage flowing on the ground, etc.). If additional help is needed, contact other employees, contractors, and/or equipment suppliers. Contact information for the District personnel is available in the Appendix 3. A comprehensive Emergency Contact List can be found in Appendix 2. Based on available information, the first responder should determine if a combination sewer cleaning truck and/or a spill response vehicle is needed.

Upon arrival at the site, the first responder should:

- Note arrival time at spill site (include in Sanitary Sewer Overflow Service Call & Field Report Form in Appendix 4).
- Verify the existence of a sewer system spill or backup.
- Field verify the address and nearest cross street, making sure it's part of the District's sewer/conveyance system.
- Identify and clearly assess the affected area and extent of spill.
- Comply with all safety precautions (traffic, confined space, etc.)
- Contact caller, if time permits.
- Notify the District Manager if:
    - The spill appears to be large, in a sensitive area, or there is doubt regarding the extent, impact, or how to proceed; or
    - Additional help is needed for line cleaning or repair, containment, recovery, lab analysis, and/or site cleanup.

3.5 Restore Flow

Upon arrival at the location of a spill into a house or a building, the first responder should evaluate and determine if the spill was caused by a blockage in the lateral or in the District owned sewer main, caused either by a backup in the sewer main line or nearby O&M activities.

- If a blockage is found in a property owner's lateral, it should be clearly communicated that it is not the District's responsibility to work on a private lateral.
- If a backup in the main line is found to have caused the SSO in a house or building, relieve the blockage in the main line and see Section 4.6 for Claims and Restoration Firm information.

The first responder should attempt to remove the blockage from the system and restore flow to the area. Using the appropriate cleaning tools, the field crew should set up downstream of the blockage and hydro-clean upstream from a clear manhole. The flows should be observed to ensure that the blockage does not recur downstream.

If the blockage cannot be cleared within a reasonable time, 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. A First Responder Contact List can be found in Appendix 3, and an Emergency Contact List is in Appendix 2.

3.6 Contain the Spill

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 available equipment and materials 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 or vacuum flow from upstream of the blockage and dispose of downstream of the blockage to prevent further overflow.
- When an SSO occurs inside of a house or building, the first responder should provide a copy of the residential sewage contamination flyer in Appendix 10 and the property owner should be instructed to follow these guidelines:
    - Keep all family members and pets away from the affected area.
    - Place towels, rags, blankets, etc between areas that have been affected and areas that have not been affected.
    - Do not remove any contaminated items
    - Turn off the HVAC system
    - Move any uncontaminated property away from the overflow area.
- NOTE: If an SSO reaches a water body, see Section 4.3 for Water Quality Sampling requirements.

3.7 SSO Notification Signage and Restrict Public Access

Barriers shall be installed to prevent the public from having contact with the sewage if possible. Signs should be posted to keep vehicles and pedestrians away from contact with spilled sewage. Do not remove the signs until directed by the District Manager. A sample warning sign is included as Appendix 5. Additional information about posting signs and public notification during major SSOs is included in Chapter 5 of this document.

Chapter 4 Recovery and Clean Up

The recovery and clean up phase begins when the flow has been restored and the spilled sewage has been contained to the extent possible.

4.1 Recovery of Spilled Sewage

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

4.2 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 District staff, a cleanup contractor will be used.

4.2.1 Private Properties

If a sewage backup occurs inside a building or on private property, provide a copy of the residential sewage contamination flyer in Appendix 10 to the resident(s).

The homeowner is responsible for clearing any blockage in the home's plumbing system or private lateral and for any resulting flood damage to the structure. The homeowner is also responsible for damage that happens because a lateral was not properly installed. Spills inside houses or buildings should be cleaned up by a professional cleaning company. Contact information for professional cleaning companies can be found in the "Water Damage Restoration" section of the Yellow Pages.

If the sewage backup is located inside a building or on private property and the backup was caused by a blockage in the public sewer main, the agency may be responsible for cleanup and restoration. If this is the case, the agency will arrange for a water damage restoration company. Claims by homeowners, if applicable, should be submitted based on information in Section 4.6 of this document.

4.2.2 Hard Surface Areas

- Collect all signs of sewage solids and sewage-related material either by hand or with the use of rakes and brooms.
- Take reasonable steps to contain and vacuum up the wastewater.
- Disinfect all areas that were contaminated from the overflow using the disinfectant solution of household bleach diluted 10:1 with water. Apply minimal amounts of the disinfectant solution using a hand sprayer. Document the volume and application method of disinfectant that was employed.
- Allow area to dry. Repeat the process if additional cleaning is required.

4.2.3 Landscaped and Unimproved Natural Vegetation

- Collect all signs of sewage solids and sewage-related material either by hand or with the use of rakes and brooms.
- Allow the area to dry. Repeat the process if additional cleaning is required.

4.2.4 Natural Waterways

The California Department of Fish and Game (CDFG) should be notified in the event an SSO impacts any creeks, gullies, or natural waterways. CDFG 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. Any water that is used in the cleanup process should be de-chlorinated prior to use.

4.2.5 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.

4.3 Water Quality Sampling

Water quality sampling and testing is required whenever spilled sewage enters a water body to determine the extent and impact of the SSO. The following guidelines must be followed:

- The first responder should notify District Manager to collect samples. Samples should be collected as soon as possible after the discovery of the SSO event.
- For spills less than 1,000 gallons, at a minimum water quality samples should be collected at the discharge point, 100 feet upstream, and 100 feet downstream.
- If a spill is more than 1,000 gallons, additional sites should be sampled; recommendations should be given according to County of Marin Environmental Health Services (EHS) requirements.

The water quality sampling procedures, which are the same as the EHS procedures are:

- Keep the sterile collection bottle closed until it is to be filled. Do not contaminate inner surface of the lid or bottle rim.
- Collect water sample just below the surface in knee deep water, approximately 3 feet deep (full arm's length), without rinsing. If needed, extend the sampling pole to the fullest length to reach deeper water depth. Minimize contact with bank or beach bed as water fouling may occur.
- Remove cap and hold the bottle near its base and plunge it, neck downward, below the surface. Turn bottle until neck points slightly upward and mouth is directed toward the current. Fill bottle leaving about 1 inch of air to allow lab to mix by shaking. Collect a minimum of 100 mL. (If applicable, insert sterile collection bottle into the holder on the sample pole. Extend the sample pole and plunge bottle end into the water, bottle opening downward.)
- Immediately place cap securely on bottle to avoid leaks and contamination.
- Dry the bottle.
- Label container with distinctive sample site name, date, and time collected.
- Complete the laboratory requisition slip with requested information (site, bottle number, collector, date and time of collection, type of sample, test requested, name and phone number of responsible person for reporting purposes, and deliverer name). Note any field observations that may have occurred during the sampling.
- Test samples from SSO events for ammonia, dissolved oxygen, fecal coliform, total coliform and enterococcus. The method of analysis for ammonia and dissolved oxygen may be a readily available, good quality test kit, suitable for field analysis.

Samples should be stored and shipped according to the following procedures:

- Place water sample bottle in a cooler with frozen blue ice. Water sample must be kept cool. Ice may be used but care must be taken so water samples are not contaminated or diluted by the ice.
- Bring to a California state-certified laboratory within 8 hours of collection. For compliance tests, the holding time must not exceed 8 hours from the time of collection to time of processing or the tests will be invalidated. Other water tests for non-compliance purposes may be held below 10 degrees C until the time of analysis, up to 24 hours.
- Water samples may be taken to the **SASM Laboratory at 450 Sycamore Avenue, Mill Valley, CA 94941, (415) 388-2402.** The water samples must be brought to the laboratory within 8 hours of collection, before 3:00 pm, for processing.

- If the SASM laboratory is closed, utilize an alternate testing laboratory managed by **Caltest Analytical Laboratory at 1885 N Kelly Rd., Napa, CA 94558 (707) 258-4000, Toll Free 888-258-TEST (8378), Fax: 707.226.1001.**

Records of monitoring information shall include the date, exact place, and time of sampling or measurements, the individual(s) who performed the sampling or measurements, the date(s) analyses were performed, the individual(s) who performed the analyses, the analytical technique or method used, and the results of such analyses.

If deemed necessary by County EHS, sampling must be tested for compliance with Public Beach Sanitation and Ocean Water-Contact Sports bacteriological standards.

A single sample exceeds the standard if:

- Total coliform bacteria are > 1,000 per 100 mL sample, if the ratio of fecal/total coliform bacteria exceeds 0.1; or
- Total coliform bacteria are > 10,000 per 100 mL sample; or
- Fecal coliform bacteria are > 400 per 100 mL sample; or
- Enterococcus bacteria > 104 per 100 mL of sample.

The mean value of at a least five weekly consecutive samples during any 30-day sampling period exceeds the standards if:

- Total coliform bacteria > 1,000 per 100 mL of sample; or
- Fecal coliform bacteria are > 200 per 100 mL sample; or
- Enterococcus bacteria are > 35 per 100 mL sample.

If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the District or its agent(s), as a result of any SSO, records of monitoring information shall include:

- The date, exact place, and time of sampling or measurements;
- The individual(s) who performed the sampling or measurements;
- The date(s) analyses were performed;
- The individual(s) who performed the analyses;
- The analytical technique or method used; and
- The results of such analyses.

4.4 Estimate the Volume of Spilled Sewage

Use the methods outlined in Appendix 6 to estimate the volume of the spilled sewage.

Some spills may occur in locations where the wastewater can seep into the ground or flow away from the spill location. In such conditions, consider when the spill was first detected and observations from bystanders in order to determine the total spill volume.

4.5 Follow Up Activities

If sewage has reached the storm drain system, the combinations sewer cleaning truck should be used to vacuum/pump out the catch basin and any other portion of the storm drain that may contain sewage.

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

4.6 Claims for Backups into a Building

The responder to a sewer backup into a house or building should

- Gather information and fill out the Sewer Backup Summary Report in Appendix 7.
- Notify the District Manager of the incident.
- Wait for restoration firm to arrive.
- Forward incident reports and related documents to District Manager.

For potential claims, follow District policies.

Chapter 5 Public Notification

5.1 Spills that do not Reach Public Waters

For spills that are contained and do not release unrecovered sewage into a storm drain, stream or a surface water body, notification to the public shall be accomplished through the use of signs at the location of the spill. See Chapter 3.7 and Appendix 5 for guidelines on the installation of signs for these types of spills.

5.2 Spills that Reach Public Waters - County EHS Requirements

The EHS Deputy Director shall determine if a field investigation of the discharge site and potentially affected areas is required. If possible, verify the extent of the contamination in the field before the water body closure decision is made. During the field investigation, EHS staff shall notify the Deputy Director of their findings by telephone.

Creeks, streams and beaches 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. “Closed” signs shall be posted at the outfall and a minimum of 100 feet upstream and 100 feet downstream of the discharge. If there is a large volume of sewage, more signs must be posted downstream.

Signs must remain posted until at least two consecutive days of samplings meet the Public Beach Sanitation and Ocean Water-Contact Sports standards as listed in Section 4.3 of this document. In the event where background levels of the water bodies may exceed the standards, EHS will analyze available test results, the situation at hand, and/or require more testing to determine if the Public Beach Sanitation and Ocean Water-Contact Sports standards can be met. The removal of signs must be approved by EHS and the County Public Health Officer.

EHS has the authority to close and re-open the beaches and water bodies for public water contact. The water bodies affected are determined by the following parameters and best professional judgment:

- The volume of sewage discharged;
- Parameters affecting flow of sewage to the water bodies;
- Direction of current;
- Tides;
- Past experience in the area; and/or
- Any other pertinent information.

5.3 Point of Contact

The District Manager shall be responsible for public notification, if necessary.

Chapter 6 SSO Documentation and Reporting

All SSOs should be thoroughly investigated and documented for use in managing the sewer system and meeting established reporting requirements.

6.1 Internal SSO Documentation

6.1.1 Category 1, 2 & 3 SSOs

The first responder will complete a work order and Field Report (Appendix 4). The first responder will follow the procedures and complete the Sewer Backup Summary Report (Appendix 7) if an SSO has occurred in a residence or building.

The District Manager will prepare a file for each individual SSO. The file should include the following information:

- Initial service call information
- Collection System Service Call & Overflow Field Report Form (Appendix 4)
- Copies of the California Integrated Water Quality System (CIWQS) report forms
- Volume estimate
- Closed-Circuit Television (CCTV) inspection (optional for Category 2 SSOs that are not blockage related)
- Water quality sampling and test results, if applicable

6.1.2 Failure Analysis Investigation (OPTIONAL)

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.

When this optional investigation is deemed necessary, the investigation should include reviewing all relevant data to determine appropriate corrective action(s). The investigation should include:

- Reviewing and completing the Field Report (Appendix 4);
- Reviewing past maintenance records;
- 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 who 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 (Appendix 8) should be used to document the investigation.

6.2 External SSO Documentation

The GWDR requires that individual SSO records be maintained by the District for a minimum of **five years** from the date of the SSO. This period may be extended when requested by a RWQCB Executive Officer. All records shall be made available for review upon SWRCB, RWQCB, or EPA staff's request. Records shall be retained for all SSOs, including but not limited to the following when applicable:

- Copy of Certified CIWQS report;
- All original recordings for continuous monitoring instrumentation;
- Service call records and complaint logs of calls received by the District;
- SSO calls;

- SSO records;
- Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps;
- Work orders, work completed, and any other maintenance records from the previous five years which are associated with responses and investigations of system problems related to SSOs;
- A list and description of complaints from customers or others from the previous five years; and
- Documentation of performance and implementation measures for the previous five years.

6.3 Internal SSO Reporting Procedure

6.3.1 Category 1 SSO

The first responder will immediately notify the District Manager. The first responder will fill out the Field Report and turn it in to the Legally Responsible Official (LRO). The District Manager, or their designee, will meet with field crew(s) at the site of the SSO event to assess the situation. In the event of a very large overflow or an overflow in a sensitive area, the District Manager may notify the Board of Directors.

6.3.2 Category 2 SSO

The first responder will fill out the Field Report and turn it in to the LRO.

6.4 External SSO Reporting Procedure

6.4.1 SWRCB Requirements (CIWQS)

The CIWQS electronic reporting system should be used for reporting SSO information to the SWRCB whenever possible. A flow chart showing the external reporting response requirements based on the type of SSO is included as **Figure 6-1** and a check list with contact information is included as **Figure 6-2**.

Figure 6-1: External Reporting Requirement Flow Chart

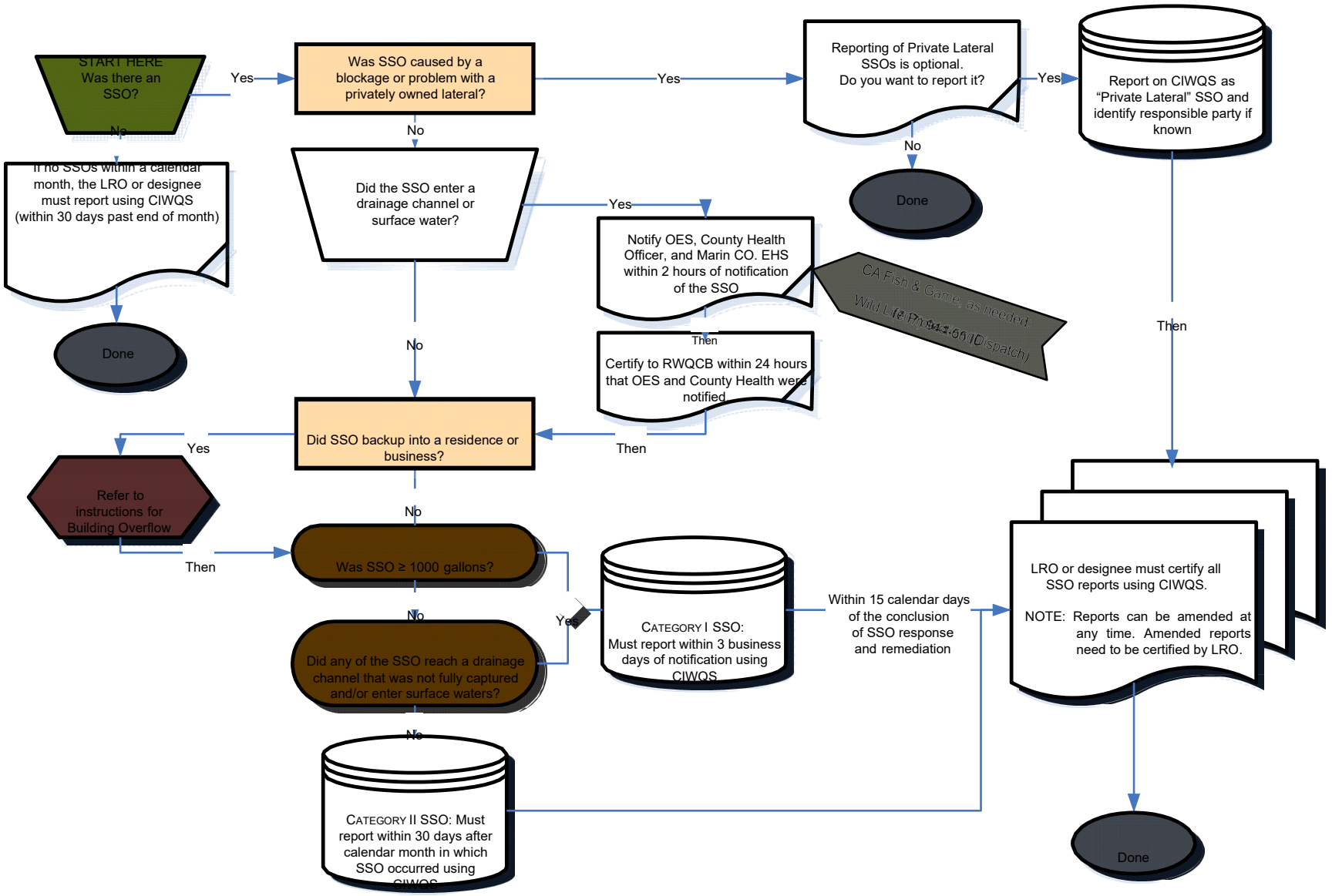


Figure 6-2: External Reporting Requirement Check List

Reporting & Certification Checklist

Category 1 SSOs that reach Surface Waters

2-Hour Notification: Regulatory Agencies (OES, County Health, RWQCB) must be notified within two hours of ANY discharge of sewage (untreated/partially treated) to a surface water or drainage channel (that is not fully captured and returned to sewer).

24-Hour Certification: Any SSO requiring notification based on the two-hour rule must be followed up with a certification submitted to the RWQCB within 24 hours.

Within 3 Business Days of Notification: As a Category I SSO, it must be reported to SWRCB using CIWQS.

Within 15 Calendar Days of Conclusion of Response/Remediation:

Must be certified by LRO using CIWQS.

Category 1 SSOs that do not reach Surface Waters

Within 3 Business Days of Notification (SWRCB/CIWQS): As a Category I SSO, it must be reported to SWRCB using CIWQS.

Within 15 calendar Days of Conclusion of Response/Remediation: Must be certified by LRO using CIWQS.

Category 2 SSOs (1,000 or more, no Property Damage or Surface Waters)

Within 3-Days submit draft and certified within 30 calendar days of end of month spill occurred . After End of Calendar Month with SSO Event: Must be reported to SWRCB using CIWQS; Must be certified by LRO using CIWQS.

Category 3 SSOs: Submit certified response within 30 Calendar days

Negative Reporting (No SSOs in Month)

Within 30 days past the end of the month: The LRO or designee must report using CIWQS.

Private Lateral SSOs (Reporting is Optional)

California Integrated Water Quality Systems (CIWQS)

SWRCB Reporting Timeframes Depend on the Size and Final Destination of the SSO.

- CIWQS must be used for reporting if the website is available (http://ciwqs.waterboards.ca.gov)
  - User Name: xxxx Password: xxxx
  - Waste Discharge Identification Number (WDID) #xxxxx
  - The SSO database will automatically generate an email notification with customized information about the SSO upon initial reporting and final certification for all Category I SSOs.
  - Emails will be sent to the EHS and the San Francisco Bay RWQCB
- Fax RWQCB (only if website is down)

Two-Hour Notification / 24-Hour Certification

1. **State Office of Emergency Services (OES)**
   Phone: (800) 852-7550; Make sure you ask for an "OES Control Number" (for RWQCB)
2. **Marin County Environmental Health Services**
   Phone - Day: (415) 499-6907 Night: (415) 499-7235 (Sheriff's Communication Center)
   County Health Officer: (415) 473-3703
3. **RWQCB Region 2 (San Francisco Bay)**
   Option of phoning in the 2-hour notification and follow up within 24 hours using the online certification or utilize the online feature for both.

Phone (2-Hour Notification)	
Phone - Day	(510) 622-2300
Phone - Night	(510) 622-2369

Online (2-Hour and/or 24-Hour Certification)

- www.wbers.net or www.r2esmr.net/sso_login2.asp
- User Name: xxxx Password: xxxx
- Locate and open the 2-Hour/24-Hour form
- Record OES Control Number on top of the page & complete form
- Send "confirming" emails (followed up with a phone call) to the EHS Director and other appropriate agencies. Add your email

Sanitary Sewer Overflow (SSO)

Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system that:

(i) Reach waters of the United States (including storm drains, unless fully captured and returned to sanitary sewer system);
(ii) Do not reach waters of the United States; or
(iii) Backs up into buildings and on private property that are caused by SASM-owned lines.

Category 1 SSOs that reach Waters of the State

If a Category 1 SSO results in a discharge to **Waters of the State** (a drainage channel or surface water, if not fully recovered), the reporting requirements as described in this section apply.

Within 2 hours of being notified of the spill event, the District Manager, or their designee, will:

- Notify Office of Emergency Services (OES) (800.852.7550) and obtain spill number for use in other reports;
- Notify the County of Marin Environmental Health Services (415.499.6907); and County Health Officer (4150 473-3703
- Prepare an initial notification to the RWQCB (www.wbers.net or www.r2esmr.net/sso_login2.asp).[1]

Within 3 business days of being notified of the spill event, District Manager, or their designee, will certify the initial report using CIWQS.

Within 15 calendar days of the conclusion of SSO response and remediation, District Manager, or their designee, will certify the final report using CIWQS.

The District Manager, or their designee, will update the certified report as new or changed information becomes available. The updates can be submitted at any time and must be certified.

Category 2 SSOs that Do Not Reach Waters of the State

Within 3 business days of being notified of the spill event, the District Manager, or their designee, will certify the initial report using CIWQS.

Within 15 calendar days of the conclusion of SSO response and remediation, the District Manager, or their designee, will certify the final report using CIWQS.

The District Manager, or their designee, will update the certified report as new or changed information becomes available. The updates can be submitted at any time and must be certified.

Category 3 SSOs

Within 30 calendar days after the end of the calendar month in which the SSO occurs, the District Manager, or their designee, will submit an electronic report using CIWQS. The District Manager, or their designee, will certify the report. The report will include the information to meet the GWDR requirements.

[1] In the event a discharger is unable to provide online notification within 2 hours of becoming aware of an SSO, it shall phone the RWQCB's spill hotline at (510) 622-2369 and convey the same information contained in the notification form. In cases where the discharger satisfies 2-hour notification requirements via phone, it must still provide online notification to the RWQCB within 3 business days of becoming aware of a SSO.

[2] In most instances, the 2-hour notification will also satisfy 24-hour certification requirements. This is because the notification form includes fields for documenting that OES and the local health department has been contacted. In other words, if a discharger is able to complete all the fields in the notification form within 2 hours, certification requirements are also satisfied. In the event a discharger is unable to provide online certification within 24 hours of becoming aware of an SSO, it shall phone the RWQCB's spill hotline at (510) 622-2369 and convey the same information contained in the certification form. In addition, within 3 business days of becoming aware of an SSO, the certification information must also be entered into the RWQCB's online system in electronic format.

Private Lateral Sewage Discharges

The District Manager, or their designee, may report private lateral SSOs using CIWQS, specifying that the sewage discharge occurred and was caused by a private lateral and identifying the responsible party (other than the District), if known.

Monthly No Spill Certification

If there are no SSOs during the calendar month, the District Manager, or their designee, will submit an electronic report that the District did not have any SSOs, **within 30 calendar days after the end of each calendar month**. The District Manager, or their designee, will certify the report.

CIWQS Not Available

In the event that CIWQS is not available, the District Manager, or their designee, will fax all required information to the RWQCB office in accordance with the time schedules identified above. In such event, the District will submit the appropriate reports using CIWQS as soon as practical. The San Francisco Bay RWQCB (Region 2) fax number is (510) 622-2460.

6.4.2 EPA Reporting Requirements

On the fifteenth day of January, April, July, and October in each year in which activities are conducted pursuant to the EPA Administrative Order, District shall submit a tabulation of all sewage spills occurring during the previous calendar quarter. The quarterly reports shall indicate, for each spill, the spill date, spill volume, volume recovered, spill location, cause, and spill destination. Certified and uncertified spill reports submitted to the SWRCB's CIWQS during the previous calendar quarter may be included.

If the District cannot be at the spill location within 60 minutes after becoming aware of the spill, the late response shall be reported as part of the quarterly spill report. The District will include in the quarterly spill report a description of all late responses, reasons for each late response, and steps that will be taken to improve the response time.

Chapter 7 Equipment Inventory

Roto-Rooter maintains a stock of emergency response equipment which is available if needed for SSO response. The Roto-Rooter equipment inventory is included as Appendix 9. The District does not maintain specialized equipment to support SSO response.

SASM maintains water quality sampling kits for the District that include:

- Sterile plastic bottles, 125 mL and 250 mL
- Laboratory requisition forms
- Styrofoam container, ice chest, or equivalent
- Blue ice packs, frozen
- Waterproof marker and ballpoint pen
- Labels for collection bottles
- Towel for drying bottles
- Sampling pole for collecting samples
- Rubber boots and/or rubberized waders

These supplies meet EHS standards for proper water quality sampling.

Chapter 8 SSO Response Training

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

8.1 Employees and Contractor Employees

8.1.1 Initial and Annual Refresher Training

All District personnel and contractor employees who may have a role in responding to, reporting, and/or mitigating a sewer system overflow should receive training on the contents of this SSORP. 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.

8.1.2 SSO Training Record Keeping

The District Manager keeps records 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 should include date, time, place, content, name of trainer(s), and names of attendees.

Appendix 1 - Overflow Response Standard Operating Procedures

Appendix 1 - Overflow Response SOP

The purpose of this Standard Operational Procedure (SOP) is to aid staff in prompt and responsible SSO response and is intended only as a condensed version of the Sanitary Sewer Overflow Response Plan (SSORP).

Addressing Service Calls

- When a report of a sewer spill or backup is made, District staff receives the call, takes the information from the caller, and fills out the first section of Field Report (SSORP Appendix 4).
- The District staff who took the call verbally communicates it to the District Manager (do not leave a voicemail) along with any information collected on the Field Report.
- The District Manager, or appropriate District personnel, then notifies the emergency response contractor (Roto-Rooter), which responds to the incident and then files a report to the District as soon as possible.
- The District Manager or the emergency contractor shall field verify the address and nearest cross street, making sure it's part of the District's conveyance system. If not, provide the caller with the phone number of the responsible agency and follow up by calling the agency yourself, providing the details of the call. Neighboring agency contact information is included in the Emergency Contact List (SSORP Appendix 2). Provide assistance if requested.
- The response measures will be based on the information provided by the caller (weather and traffic conditions, small back up vs. sewage flowing on the ground, etc). If additional help is needed, the District Manager will contact other employees, contractors, and/or equipment suppliers as listed in the Emergency Contact List (SSORP Appendix 2) and the First Responders Contact List (SSORP Appendix 3).

Responding to SSOs

- The First Responder shall visit the site immediately in an attempt to minimize or eliminate an overflow. Respond with the combination sewer cleaning truck and/or spill response vehicle depending on the situation.
- Upon arrival at the site, clearly assess the situation and comply with all safety precautions (traffic, confined space, etc.) and verify the existence of a sewer system spill or backup.
- Identify and assess the affected area and extent/impact of the spill and request additional help as needed for line cleaning or repair, containment, recovery, lab analysis and site cleanup.
- 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 or conveyance system requires construction repairs, contingency plans must be employed as needed, including containment, bypass pumping, contractual assistance etc. If assistance is required, immediately contact other employees, contractors and equipment suppliers as required. See Emergency Contact List and First Responders Contact List (included as SSORP Appendices 2 and 3, respectively).
- Signs warning the public of a sewage release should be posted in the affected area. Use barricades, caution tape, cones, etc. as needed. (SSORP Appendix 5). Warning signs

should remain posted until the District Manager approves their removal. For larger spills that reach surface water bodies, the District Manager may have to receive approval from the County of Marin Environmental Health Services Department or Regional Water Quality Control Board staff.

- If the spill or overflow volume equals or exceeds 1,000 gallons or the spill is in a sensitive area, sampling shall be conducted in accordance with Chapter 4 of the SSORP.
- The response crew shall complete the Field Report (SSORP Appendix 4) and provide copies as stated at the bottom of the report.
- SSO Notification and Reporting: Accurate and responsive reporting is vital. Refer to the SSO External Reporting Requirement Flow Chart (SSORP Figure 6-1).

Home or Business Back Ups

In the event of a backup into a home or business, SSORP Chapter 4 shall be used to guide staff through the process.

REFERENCES

Addressing Service Calls

- *Sanitary Sewer Overflow Field Report Form (SSORP Appendix 4)*
- *Emergency Contact List (SSORP Appendix 2)*
- *First Responders Contact List (SSORP Appendix 3)*

Responding to SSOs

- *Collection System Failure Analysis Form (SSORP Appendix 8)*
- *Methods for Estimating Spill Volume (SSORP Appendix 6)*
- *Sample Warning Sign (SSORP Appendix 5)*
- *SSO External Reporting Requirement Flow Chart (SSORP Figure 6-1)*
- *Emergency Response Inventory List (SSORP Appendix 9)*

Appendix 2 - Emergency Contact List

Appendix 2 – Emergency Contact List

Neighboring Agencies

Agencies	Phone Number
Alto Sanitary District	415.388.3696
City of Mill Valley	415.388.4033
City of Sausalito	415.289.4113
Homestead Valley Sanitary District	415.388.4796
Richardson Bay Sanitary District	415.388.1345
Sausalito Marin City Sanitary District	415.332.0244
Sewerage Agency of Southern Marin	415.388.2402
Tamalpais Community Services District	415.388.6393

Almonte Maintenance Contractors

Company	Phone Number
Pipeline Contractors	
Roto-Rooter	415.388.2740
Ghilotti Bothers	415.454.7011
Forde Construction	415.924.3072
Team Ghilotti	415.720.5936
2,000 gallon tank trucks	
Mountain Sewer Service	415.383.6000
Roto-Rooter	415.388.2740
Roy's Sewer Service	415.456.2320
4,000 gallon tank trucks	
Erickson (Richmond)	510.235.1393
IT Corporation (San Jose)	408.894.1200
Equipment Rental	
Big 4 Rents (Corte Madera)	415.924.4444
Davis Rents (San Rafael)	415.454.1225
Welders	
Zappetini & Son	415.454.2511
Sun Ironworks	415.453.7562
Plating or Shoring	
Plank Inc.	707.763.7070
Baker Tanks	510.439.8251

Appendix 3 - First Responders Contact List

Appendix 3 – First Responder Contact List

Almonte Sanitary District

Shonn Dougherty	**District Manager**	**(415) 388-8775**
Dave Haflich	**Asst District Mgr**	**(707) 799-6565**

ROTO ROOTER EMERGENCY EMPLOYEE CONTACTS

Employee Name	**Cell Number**
MANAGERS	
Adam Gallagher	415-559-1066
Stan Stanfield	415-328-9749
SERVICE TECHNICIANS	
Alex Branche	415-858-5494
Cody Cusick	415-559-2248
Tim Detels	415-798-6468
Fernando Lara	415-559-2230
Rob Murphy	415-720-0611
Jelani Pavageau	415-559-4468
John Selhorst	415-559-2231
Jarrod Stuckenbroker	415-559-1175
CREW TECHNICIANS	
Fernando Flores	415-720-0204
Matt LaForge	415-720-0512
Julio Mier	415-726-3015
Gerardo Navarro	415-720-1782
Gerry Rosell	415-720-0498
Nick Udaloff	415-720-6319
OFFICE EMPLOYEES	
Jen Giuntini	415-898-2700
Lauren Dyson	415-898-2700

Appendix 4 - Sanitary Sewer Overflow Service Call & Field Report Form

Appendix 4 – Sanitary Sewer Overflow Service Call & Field Report Form

INITIAL INFORMATION

DATE:	CALL RECEIVED: AM / PM
RECEIVED BY:	CALLER'S NAME:
CALLER'S PHONE #:	CALLER'S ADDRESS:
SPILL LOCATION NAME / LOCATION OF OVERFLOW:	CROSS STREET:
TIME AND NAMES OF CREW MEMBERS CONTACTED:	
DESCRIPTION OF COMPLAINT:	

THis field report, gas detector, radio, system maps, personal protective equipment and camera should be collected by field crew prior to responding.

WORK ORDER NO:	
FREQUENCY OF CLEANING PROGRAM:	DATE OF LAST CLEANING:
RECOMMENDATIONS ON HOW TO ELIMINATE FUTURE PROBLEMS:	
FAILURE ANALYSIS COMPLETE: ☐ YES ☐ NO	DATE:

Distribute field report immediately Manager.

FIELD REPORT FOR RESPONSE CREW'S USE

TIME MOBILIZED: AM / PM		CREW:	
TIME ARRIVED AT SITE: AM / PM			
FORM COMPLETED BY:		DATE:	
ASSET #:	U/S ASSET #:	WORK AREA:	D/S ASSET#:
SIZE OF LINE:	LENGTH OF LINE:	EASEMENT: YES ☐ NO ☐	
GPS COORDINATES (LATITUDE / LONGITUDE; IF AVAILABLE):			

COMMENTS:

SKETCH OF AREA: (INCLUDE MANHOLES, INTERSECTIONS, STOPPAGE LOCATION, ETC.)

COMPLETE FORM IF AN OVERFLOW HAS OCCURRED

TIME OVERFLOW STARTED:	TIME OVERFLOW STOPPED:
DURATION OF SSO:	EST. SPILL VOLUME (GALLONS):

DESCRIBE HOW OVERFLOW QUANTITY WAS CALCULATED (APPENDIX 6 OF SSORP):

- EYEBALL ESTIMATE
- DURATION / FLOWRATE
- MEASURED VOLUME
- OTHER:_____

DID SSO REACH STORM DRAINPIPE THAT WAS NOT FULLY RECOVERED? YES ☐ NO ☐

DID SSO DISCHARGE TO DRAINAGE CHANNEL AND/OR SURFACE WATER? YES ☐ NO ☐

IMPACTED SURFACE WATER(S)(IF APPLICABLE):

IMPACTED BEACH(ES) (IF APPLICABLE):

FINAL SSO DESTINATION:

STORM DRAIN BUILDING YARD/LAND SURFACE WATER NO WATER INVOLVED

CAPTURED FROM STORM DRAIN (100%) OTHER:_____

VOLUME RECOVERED / RETURNED TO SEWER SYSTEM (GALLONS):

VOLUME TO WATERS & NOT RECOVERED, INCLUDING SURFACE WATER, DRAINAGE CHANNEL, OR **NOT** RECOVERED FROM STORM DRAIN (GALLONS):

FOR CONTINUING SPILLS WITHOUT COMPLETE BLOCKAGE REMOVAL AND/OR REPAIRS (IF APPLICABLE), CURRENT SPILL RATE (GALLONS PER MINUTE):

WEATHER: SUNNY CLOUDY RAINY RAIN FOR SEVERAL DAYS

PRIMARY CAUSE:

ROOTS	GREASE	DEBRIS	VANDALISM	PIPE FAILURE
CONSTRUCTION DAMAGE		PUMP STATION FAILURE		POWER FAILURE
CAPACITY (HEAVY RAIN)			OTHER:_____	

ADDITIONAL INFORMATION:

SPILL APPEARANCE POINT / SOURCE OF SSO: MANHOLE GRAVITY MAIN FORCEMAIN CLEAN OUT PRIVATE LATERAL PUMP STATION:_____(NAME) OTHER:_____		
BLOCKAGE LOCATION: UPSTREAM MH#: _____	PRIVATE LATERAL DOWNSTREAM MH#: _____	OVERFLOW MH#: _____
DESCRIBE CLEANUP METHOD:		
PHOTOS/VIDEO TAKEN: YES ☐ NO ☐	PHOTO/VIDEO FILE LOCATION:	
SAMPLES TAKEN BY:	LOCATION OF SAMPLES:	
DESCRIBE PROPERTY DAMAGE:		
SIGNS POSTED: YES NO ☐	NEIGHBORS NOTIFIED: YES ☐ NO ☐	
BARRICADED: YES ☐ NO ☐	OES NOTIFIED: YES ☐ NO ☐ ; DATE / TIME:_____	
OES CONTACTS/DETAILS:		
OES SSO#:		
RWQCB NOTIFIED: YES ☐ NO ☐ ; DATE / TIME:_____		
OTHER AGENCIES NOTIFIED:_____		
SSO INFORMATION FAXED TO RWQCB: YES ☐ NO ☐ ; DATE / TIME:_____		
CALLER/CUSTOMER NOTIFIED RE: STATUS: YES NO		
IF NOT, WHY:		
RECOMMENDED SPILL CORRECTIVE ACTIONS:		

Appendix 5 - Sample Warning Sign

WARNING

WATER CONTACT MAY CAUSE ILLNESS

¡ AVISO!

EL CONTACTO CON AGUA PUEDE CAUSARENFERMEDADES

BY ORDER OF THE HEALTH OFFICER
County of Marin
FOR FURTHER INFORMATION
CALL: (415) 499-6907

OR CALL

SHONN DOUGHERTY, DISTRICT MANAGER
ALMONTE SANITARY DISTRICT
(415) 388-8775

WARNING

WATER CONTACT MAY CAUSE ILLNESS

¡ AVISO!

EL CONTACTO CON AGUA PUEDE CAUSARENFERMEDADES

BY ORDER OF THE HEALTH OFFICER
County of Marin
FOR FURTHER INFORMATION
CALL: (415) 499-6907

OR CALL

SHONN DOUGHERTY, DISTRICT MANAGER
ALMONTE SANITARY DISTRICT
(415) 388-8775

Appendix 6 - Methods for Estimating Spill Volume

Appendix 6 - Methods for Estimating Spill Volume

A variety of approaches exist for estimating the volume of a sanitary sewer spill. This appendix documents the three methods that are most often employed. The person preparing the estimate should use the method most appropriate to the sewer overflow in question and use the best information available.

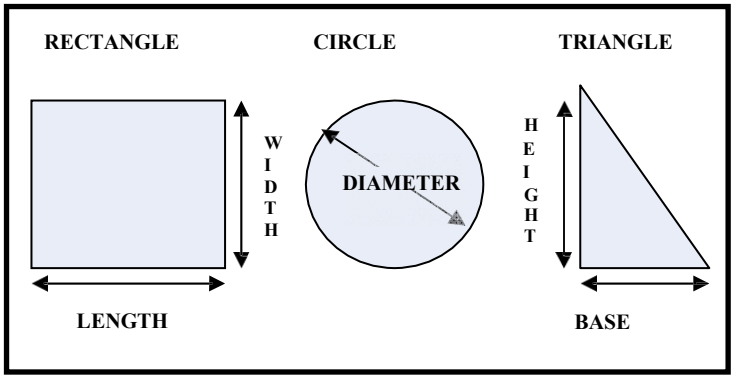
Method 1: Eyeball Estimate

The volume of small spills can be estimated using an "eyeball estimate". To use this method imagine the amount of water that would spill from a bucket or a barrel. A bucket contains 5 gallons and a barrel contains 50 gallons. If the spill is larger than 50 gallons, try to break the standing water into barrels and then multiply by 50 gallons. This method is useful for contained spills up to approximately 200 gallons.

Method 2: Measured Volume

The volume of most small spills that have been contained can be estimated using this method. The shape, dimensions, and the depth of the contained 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.

Common Shapes and Dimensions



Step 1 Sketch the shape of the contained sewage (see figure above).

Step 2 Measure or pace off the dimensions.

Step 3 Measure the depth at several locations and select an average.

Step 4 Convert the dimensions, including depth, to feet.

Step 5 Calculate the area in square feet using the following formulas:

Rectangle: Area = length (feet) x width (feet)

Circle: Area = diameter (feet) x diameter (feet) x 0.785

Triangle: Area = base (feet) x height (feet) x 0.5

Step 6 Multiply the area (square feet) times the depth (in feet) to obtain the volume in cubic feet.

Step 7 Multiply the volume in cubic feet by 7.5 to convert it to gallons

Method 3: Duration and Flowrate

Calculating the volume of larger spills, where it is difficult or impossible to measure the area and depth, requires a different approach. In this method, separate estimates are made of the duration of the spill and the flowrate. The methods of estimating duration and flowrate are:

Duration

The duration is the elapsed time from the time the spill started to the time that the flow was restored.

Start Time: The start time is sometimes difficult to establish. Here are some approaches:

1. Local residents can be used to establish start time. Inquire as to their observations. Spills that occur in rights-of-way are usually observed and reported promptly. Spills that occur out of the public view can go on longer. Sometimes observations like odors or sounds (e.g. water running in a normally dry creek bed) can be used to estimate the start time.
2. Changes in flow on a downstream flowmeter can be used to establish the start time. Typically the daily flow peaks are "cut off" or flattened by the loss of flow. This can be identified by comparing hourly flow data during the spill event with flow data from prior days. This method will likely only be effective with consistent weather.
3. Conditions at the spill site change over time and can be used to establish the start time. Initially there will be limited deposits of toilet paper and other sewage solids. After a few days to a week, the sewage solids form a light-colored residue. After a few weeks to a month, the sewage solids turn dark. The quantity of toilet paper and other materials of sewage origin increase over time. These observations can be used to estimate the start time in the absence of other information. Taking photographs to document the observations can be helpful if questions arise later in the process. This method is valid for spills that have been occurring for a long time and may be used in conjunction with either of the above methods.
4. It is important to remember that spills may not be continuous. Blockages are not usually complete (some flow continues). In this case the spill would occur during the peak flow periods (typically 10:00 to 12:00 and 13:00 to 16:00 each day). Spills that occur due to peak flows in excess of capacity will occur only during, and for a short period after, heavy rainfall.

End Time: The end time is usually much easier to establish. Field crews on-site observe the "blow down" that occurs when the blockage has been removed. The "blow down" can also be observed in downstream flowmeters.

Flow Rate

The flowrate is the average flow that left the sewer system during the time of the spill.

There are three common ways to estimate the flowrate:

1. **The San Diego Manhole Flowrate Chart:** This chart, included as at the end of this appendix, shows sewage flowing from manhole covers at a variety of flowrates. The observations of the field crew can be used to select the appropriate flowrate from the chart. If possible, photographs are useful in documenting basis for the flowrate estimate.

2. **Flowmeter:** Changes in flows in downstream flowmeters can be used to estimate the flowrate during the spill.
3. **Counting Connections:** Once the location of the spill is known, the number of upstream connections can be determined from the sewer maps. Multiply the number of connections by 200 to 250 gallons per day per connection or 8 to 10 gallons per hour per connection.

   For example: 22 upstream connections * 9 gallons per hour per connection

   = 198 gallons per hour / 60 minutes per hour

   = 3.3 gallons per minute

Spill Volume

Once duration and flowrate have been estimated, the volume of the spill is the product of duration (hours or days) and the flowrate (gallons per hour or gallons per day).

For example:

Spill start time = 11:00

Spill end time = 14:00

Spill duration = 3 hours

3.3 gallons per minute x 3 hours x 60 minutes per hour

= 594 gallons

City of San Diego
Metropolitan Wastewater Department

Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes

All l.J!tim.:ltl.Js are c /culated in gallons per minute (gpm)

W stewatQr Collection Division
(619)654-4160


5 gpm

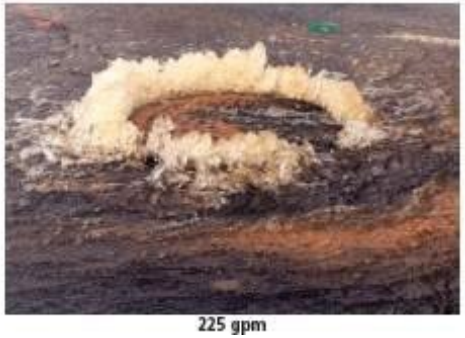

25 gpm


50 gpm


100 gpm


150 gpm


200 gpm


225 gpm


250 gpm


275 gpm

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Appendix 7 - Sewer Backup Summary Report

Appendix 7 - Sewer Backup Summary Report

District's Site Arrival Time:_____ Time Cleaning Contractor Called: _____

Section A

DATE: TIME: EMPLOYEE NAME:

RESIDENT: PROPERTY MANAGER(S):

STREET ADDRESS: STREET ADDRESS:

CITY, STATE AND ZIP: CITY, STATE AND ZIP:

PHONE: PHONE:

CAUSE OF FLOODING:

LOCATION/SEWER: □ STREET □ REAR EASEMENT □ MANHOLE #_____TO_____

□ MAINLINE □ SERVICE LINE □ DOUBLE-WYE

DAMAGE: □ BLACK WATER □ GREY WATER □ FRESH WATER

OF PEOPLE LIVING AT RESIDENCE:

Comments:

CLEANING SERVICES: □ REQUESTED BY OWNER – WAIT FOR CLEANING CONTRACTOR TO ARRIVE

□ DECLINED BY OWNER

Section B

APPROXIMATE AGE OF HOME:_____# OF BATHROOMS:_____# OF ROOMS AFFECTED: _____

APPROXIMATE AMOUNT OF SPILL:_____(GALLONS)

APPROXIMATE TIME SEWAGE HAS BEEN SITTING:_____(*HOURS/DAYS*)

NUMBER OF PICTURES TAKEN:_____ DIGITAL OR FILM? _____

DOES THE CUSTOMER HAVE A BACKFLOW PREVENTION DEVICE (BPD)? □ YES □ NO

IF YES, WAS THE BPD OPERATIONAL AT THE TIME OF THE OVERFLOW? □ YES □ NO

HAVE THERE BEEN ANY PREVIOUS SPILLS AT THIS LOCATION? □ YES □ NO □ UNKNOWN

TYPE OF FLOORING IN THE ROOM AFFECTED:

□ TILE CONDITION OF TILE AND SEAMS (CRACKING, VISIBLE OPEN SPACES, ETC.)

□ CARPET

□ WOOD CONDITION OF FLOORING AND JOINTS (CRACKING, VISIBLE OPEN SPACES, ETC.)

□ OTHER PLEASE IDENTIFY:

HAS THE RESIDENT HAD ANY PLUMBING WORK DONE RECENTLY? □ YES □ NO □ UNKNOWN

IF YES, PLEASE DESCRIBE:

ARE THERE BASEBOARDS: □ YES □ NO BASEBOARD MATERIAL: _____

CONDITION OF BASEBOARDS:

□ BASEBOARD BOTTOM HAS TIGHT SEAL WITH WALL

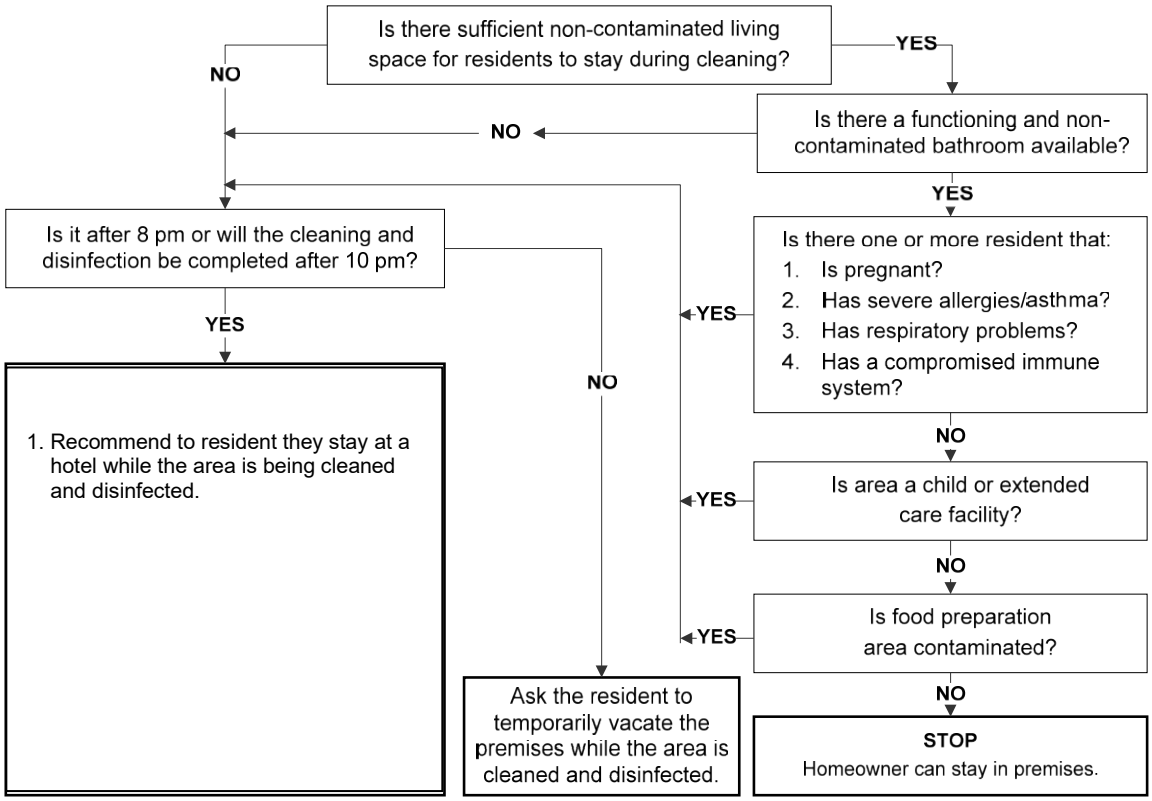
□ BASEBOARD TOP HAS TIGHT SEAL WITH WALL

□ BASEBOARD HAS SPACE BETWEEN BOTTOM & FLOOR

□ BASEBOARD HAS SPACE BETWEEN BASEBOARD & WALL

Appendix 7 - Sewer Backup Summary Report

SECTION C: LIVABILITY ASSESSMENT



PLEASE DIAGRAM THE ROOMS AFFECTED (SHADE THE AREAS MOST HEAVILY)

SECTION D: CLEANING CONTRACTOR

COMPANY NAME: PHONE: ARRIVAL TIME:

COMMENTS:

Appendix 8 - Collection System Failure Analysis Form

Appendix 8 – Collection System Failure Analysis Form

CIWQS Event ID:		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		
Maintenance Manager: Review Date:			
Operational Services Director: Review Date:			

Appendix 9 - Equipment Inventory

Appendix 9 – Equipment Inventory

Roto-Rooter Inventory

Major Response Equipment

Combination hydroflusher/vacuum unit – 5-yard, 1000 gallon water tank

Combination hydroflusher/vacuum unit – 9-yard, 1000 gallon water tank

Rodding units – 1,500’ of 3/8” rod

CCTV Vans

Tractor driven CCTV cameras

Push cameras

Pump Truck – 2,500 gallons

Portable hydroflushing equipment – 16 hp, can clean up to 6” pipe

Portable rodder w/ 11/16” rod, 165’ cable capable of cleaning up to and including 6” pipe

Trailer

Bypass Equipment

2” Pump – Hydromatic with cam-lock connection

2”, 3”, and 4” cam-lock hoses (12 pieces of 25’ hose each, total 300’)

Fire hoses – 200’ of 3” hose (screw-on connection)

Containment Equipment

Containment rings for immediately around manhole

3’ x 5’ mats

3 mil and 5 mil Vizquin (thick plastic)

Plugs for all standard pipe sizes between 1.5” to 24”

Sand bags

Repair Equipment

Repair trucks for emergency repairs

Hitachi TB-25 for excavation, can dig to 7 feet

Cut-Off Saws – Gas-powered with 14” wheel

Air compressors

Locating equipment

600’ heavy duty, can locate to 30 feet

300’ regular duty

MH & castings, lids, and rings

Rod Hole castings, lids

Pipe

6” to 24” C-900 pipe

6” to 24” SDR 17 pipe

8” to 10” VCP pipe

Plates for covering
trenches Shoring
Dump truck

Confined Space Equipment
Gas detectors
Tripod
Harnesses
Blowers
Cable and winch

Washdown equipment
Camel machine has 500’ of hose
Camel has 100 feet of auxiliary hose
Spray nozzles
Pressure washer

Traffic Control Equipment
Cones
Signs
Road Work Ahead
Flagger Ahead
Arrows for Cones

Miscellaneous Tools and Equipment
Shovels
Couplers
Rakes
Brooms
Star Drill
Ladders
Sump Pumps
Hammer
Chisel
Screwdrivers
Manhole hook
50’ extension cords (2 per truck)
100’ extension cord (1 per truck)
Generators 2,500 watt

Appendix 10 - Residential Property Sewage Contamination Flyer

General Precautions for Sewage Contamination on Residential Property

If a sewer backup causes flooding in your home:

- Keep people and pets away from the affected area(s).
- Do not attempt to clean it yourself.
- Turn off central heat and air-conditioning systems and prevent flow from reaching floor vents by using towels or blankets as a berm. You can also remove the vent cover and stuff a towel in the opening to help prevent the flow from entering.
- Leave items in the affected area for the experts to handle.

Homeowner responsibilities

The homeowner is responsible for clearing any blockage in the home's plumbing system or private lateral and for any resulting flood damage to the structure. The homeowner is also responsible for damage that happens because a lateral was not properly installed. If the sewage flooding was caused by blockage in your private lateral:

- Call an experienced restoration companyfor cleanup and removal of affected surfaces.[1]
- Report a claim to your homeowner's insurance carrier.
- If you had recent plumbing work, contact your plumber or contractor.

If the sewage flooding was caused by a blockage in the public sewer main, the agency may be responsible for the damage. If you have a claim, file your claim as soon as possible. And the agency and/or insurance carrier will arrange for a restoration company.

Note: This information is provided to assist residents who experience an overflow of sewage on their property. It is not inclusive of events involving severe flooding, which can cause additional structural damage.

To report a sewage spill, contact SASM at (415) 388-2402.

1. See "Water Damage Restoration" section of the Yellow Pages for a list of restoration contractors.

APPENDIX B

District and SASM Ordinances

ALMONTE SANITARY DISTRICT OF MARIN COUNTY

ORDINANCE NO. 2011-01

AN ORDINANCE AMENDING ORDINANCE NO. 31 - REGULATING THE CONSTRUCTION AND MAINTENANCE OF PRIVATE LATERAL SEWERS, PROVIDING FOR THE MAINTENANCE OF SUCH PRIVATE LATERAL SEWERS, AND SUPERSEDING RELATED PORTIONS OF PREVIOUSLY ADOPTED DISTRICT ORDINANCES

The Board of Directors of the Almonte Sanitary District do ordain as follows:

Section 1.0: Ordinance 31 of the Almonte Sanitary District is hereby amended by changing Section 2.1 to read as follows:

Section 2.1. EXTENT OF DISTRICT'S AUTHORITY: The Almonte Sanitary District shall have authority over any and all public and private sanitary sewer systems previously constructed, or to be constructed, within the District, or which discharge into the District's sewer system.

The District's authority shall include all sanitary systems within public streets, rights of way and easements, and with private property up to the outer face of all buildings connecting to or served by such sanitary systems.

The District shall be responsible for maintenance of all public sewers.

Property owners shall be responsible for maintenance of all private sewer systems and private laterals.

The District may, at its sole discretion and in conjunction with the maintenance, repair or replacement of the District sewer system, repair or replace all or a portion of the private sewer lateral. Ownership and maintenance of the repaired or replaced private sewer lateral shall remain with the owner of the property served thereby.

Pursuant to Health and Safety Code Sections 6522 and 6523.2, the District may enter upon private property to inspect sanitary and waste disposal facilities.

When the District determines that necessary or required maintenance and/or repairs to a private sewer lateral or sewer system are derelict or inadequate, it will notify the property owner of such determination and require that appropriate measures be undertaken and completed within a time certain to alleviate the situation.

In the event of non-compliance with its directive or by reason of the potential public health hazard involved, the District may then proceed to have the necessary maintenance and/or repair work performed by others. All costs incurred by the District to accomplish such work shall thereupon become payable by the owner of the property to the District.

Should the owner fail to make such payment within thirty (30) days from the date of the District's billing, the full amount of the District's costs for the work performed, plus all legal and filing fees, may b<:: filed as a lien against the property, or added to any sewer service charge pursuant to Health and Safety Code Section 6523.3.

Section 2. This ordinance shall be effective July 27, 2011 and in accordance with the requirements of Section 6491.3 of the California Health and Safety Code, a summary of this Ordinance will be published with the names of the Directors voting for and against it in the Marin Independent Joumal, a newspaper of general circulation published within said Sanitary District.

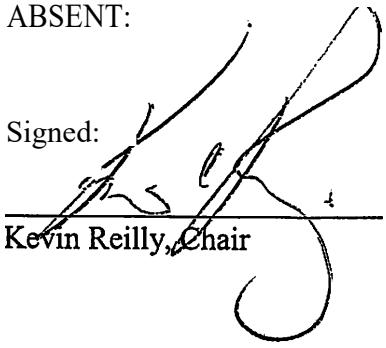
PASSED AND ADOPTED this 25th day of July 2011 by the following votes:

AYES:

NOES:

ABSENT:

Signed:



Kevin Reilly, Chair

Countersigned

Lew Kious, Secretary/Treasurer

ORDINANCE NO. 31

OF THE

ALMONTE SANITARY DISTRICT

MARIN COUNTY, CALIFORNIA

AN ORDINANCE REGULATING THE CONSTRUCTION AND MAINTENANCE OF PRIVATE'LATERAL SEWERS, PROVIDING FOR THE MAINTENANCE OF SUCH PRIVATE LATERAL SEWERS, AND SUPERCEDING RELATED PORTIONS OF PREVIOUSLY ADOPTED DISTRICT ORDINANCES

The Board of Directors of the Almonte Sanitary District does ordain as follows:

Section 1.0. A LATERAL SEWER is hereby defined as a sewer pipe intended to convey sewage from the plumbing system of a building or buildings into the District's collection system; including the connection thereto, and all pipe, fittings and appurtenances, whether above ground level or buried, between the outside face of the building(s) served and the District main.

Section 2.0. COMPLIANCE WITH DISTRICT REGULATIONS: Prior to undertaking the construction of a lateral sewer, or connecting a new residential unit to an existin9 lateral the owner of the property to be served by-said lateral, or his agent, shall apply for and obtain a permit therefor from the District and pay the required fee.

The application for said permit shall include a plan of the proposed lateral ----sewer, showing the connection to the District main, the location and dimensions of the proposed sewer and any other existing or proposed sewers on the property, and all buildings and significant features of the property-and of the public right-of-way in which the District main is located.

The District Engineer shall be notified when the lateral and its connection to the District main is ready for inspection, and the installation shall not be backfilled, enclosed fr otherwise hidden from view until it has been inspected and approved by the Disylct Engineer.

(All workmanship and materials shall be in accordance with the applicable sections of the Uniform Plumbing Code, and the District's standards for sewer construction.

Section 2.1. EXTENT OF DISTRICT's AUTHORITY: The Almonte Sanitary District shall have authority over any and all public and private sanitary sewer systems previously constructed, or to be constructed, within the District, or which discharge into the District's sewer system.

The District's authority shall include all sanitary systems within public streets, rights of way and easements, and within private property up to the outer face of all buildings connecting to or served by such sanitary systems.

The District shall be responsible for maintenance of all public sewers, and private sewers within public streets, rights-of-way and easements.

Property owners shall be responsible for maintenance of all private sewer systems within their property lines.

Pursuant to Health and Safety Code Sections 6522 and 6523.2, the District may enter upon private property to inspect sanitary and waste disposal facilities.

When the District determines that necessary or required maintenance and/or repairs to a private sewer lateral or sewer system are derelict or inadequate, it will notify the property owner of such determination and require that appropriate measures be undertaken and completed within a time certain to alleviate the situation.

In the event of non-compliance with its directive or by reason of the potential public health hazard involved, the District may then proceed to have the necessary maintenance and/or repair work performed by others. All costs incurred by the District to accomplish such work shall thereupon become payable by the owner of the property to the District.

Should he owner fail to make such payment within thirty (30) days from the date of the District's billing, the full amount of the District's costs for the work performed, plus all legal and filing fees, may be filed as a lien against the property, or added to any sewer service charge pursuant to Health and Safety Code Section 6523.3.

Section 3.0. COMPLIANCE WITH COUNTY REGULATIONS: Any person constructing a lateral sewer within any street, including those not maintained by the County, shall comply with all County laws, ordinances, rules and regulations pertaining to the cutting of pavement, opening, barricading, lighting and protection of trenches, backfilling and repaving thereof and shall obtain all permits and pay all fees required by the Marin County Department of Public Works.

Section 4.0. SEPARATE LATERAL SEWERS: Each separabe building shall be connected to the main sewer with a separate lateral sewer, except that one or more buildings located on property in common ownership may be served by the same lateral if the District determines that construction of separate laterals to serve each building would not be feasible. However, if the ownership of said property is subsequently divided, each building under separate ownership shall be provided with a separate lateral sewer, and it shall be unlawful for the owners thereof to continue to use or maintain such common lateral sewer.

Single family residential units with common walls, condominiums, stock cooperatives, community apartments or other similar improvements which entitle owners of interests therein to occupy independent ownership and to make joint use of utility and other services, which may be provided by facilities owned in common, may be permitted by the

District to maintain a common lateral sewer or sewers.

Section 5.0. MAINTENANCE OF LATERAL SEWER: Laterals shall be the property of and shall be maintained by the owner of the property served thereby. Where a lateral provides service to more than one single family residential unit on property in common ownership or in developments with common walls, condominiums, stock cooperatives, community apartments, or other similar improvements, the obligation to maintain the lateral shall be with the owners, the homeowners' association or other entity responsible for the maintenance of the property and facilities owned in common.

Section 6.0. PROPER USE OF SEWERS: No connection shall be made to any District sewer or to any lateral sewer for the purpose of conducting storm water, surface drainage or ground water into said sewer. No discharge shall be made into any District sewer of any solid or liquid wastes other than sewage originating from residential or commercial baths, toilets, laundries and sinks. Discharge of toxic substances or substances which may generate flammable gases is specifically prohibited.

No surface drains for storm or ground water shall be connected to any sanitary sewer. No surface or storm water, seepage or unpolluted water from any source shall be permitted to enter into a sanitary sewer by any means whatsoever.

Section 7.0. CONFLICT WITH OTHER ORDINANCES: Any District Ordinances or parts of Ordinances in conflict with the provisions of this Ordinance are hereby repealed.

Passed and adopted on the 22nd day of July, 1985 by the following vote:

Ayes _____

Noes _____

Absent _____

chairman of the Board of Directors
Almonte Sanitary District
Marin County, California

ATTEST

Secretary, Almonte Sanitary District

ORDINAN'cE NO. 83-1

·AN ORDINAN.CE ADOPTING AND ESTABLISHING
WASTEWATER DISCHARGE REQUIREMENTS FOR
THE US.ERS OF THE SANITARY SEWERAGE FACILITIES. OF TI-
IE SEWERAGE AGENCY OF SOUTHERN MARIN

The Board of Commissioners o_f the Sewerage Agency of Southern 1arin ,. a· joint powers agency, Marin County, California, does ordain as fonows:

ARTiCLE J

GENERAL. PROVISJO.NS

SECTION 1.01 Purpose and Policy This Wastewater Discharge Ordinance sets unifo_rm requirements for discharges into the wastewate.r .collection and treatment system and enijbles SASM to comply_ wi,!h the administrative provisions of the Clean Water Grant Regulations, the water quality require-ments set by the Regional Water Quality Control Board ·and the applicable effluent limi ations, national standards of performance, toxic nd pretr'eat-ment effluent standards, and any other discharge criteria which are required or authorized by State or Federal law, and to derive the maximum public _benefit by regulating the quality and quantity of. wastewater dis-charged into the sewer system tributaries to a SASM treatment works. This Ordinance provides a·means for determining constituents and characteristics, and t e issuance of permits to certain users.

SECTION 1 02 Definitions. Unless otherwise defined herein, terms shall be as adopted in the latest edition of Standard Methods for the Examination of Water and Wastewater, publisbed by the American Public Health Association, and the Water PoHution Control Federa_tion. Waste constituents and characteristics shall be measured by Standard Methods unless expressly stated, or as established by Federal· or State regulatory agencies.

(a) "Agency" - Any public entity which is a member of SASM, including_: the Almonte Sanitary J;?istrict, the Alto Sanitary . District, The City of Mill Valley, the Homestead Valley Sanitary District, the ichardson Bay Sanitary District, · or the Tamalpais C mmu_nity Swvices District.

(b) "Building Sewer" - A sewer conveying wastewater from the premises of a user to a community sewer.

(c) '-'Beneficial Uses" - Uses of the waters of the State .that may _Re protected against quapty degradation in5=luding domestic, municipal, agricultural and industrial supply, power generation, recreation, aesthetic enjoyment,· navigation and· the preservat on and enhance-· ment of fish, wildlife, and other aquatic res urces or _reserve , and other uses, both tangible or intangible as sp cified by Federa_l or State law:.

(d) "Comm nity ·sewer" A sewer owned and operated b_y an Agency -tributary to· a treatment works ope ted by SASM.

(e) "Compatible Pollutant" - Biochemical _oxygen demand, suspended solids, pH and fecal coliform bacteria, plus additional pollutants identified in SASM's Nati nal Pollutant Dis harge Elimination System (NPDES_) Permit' if SASM's treatment works_ was de.signed to treat such pollutants, and in fact does remove such por-lutants. to a substantial degree.

(f) [11] Contamination" - An impairment of the quality of the waters of the State by waste to a· de_gree-:which creates a hazard to t e ·public health through poisoning or through the sprei!d. of tfisease. · Contamination shal I include any equivalent effect resulting from the disposal of wastewater, whether or r:aot Waters of the State -are affected.

(g) "Federal Act" - The Federal Water Pollution Control -Act, PL 92-500, and any amendments thereto; as well as any· guidelines, limitations, and standards promulgated by the Environmental Protection Agency pursuan to the Act.

(h) 11 Holding Tank Waste" - Any waste from holding tan s such as vessels, chemical toilets, c mpers,. trailers, s ptic tanks, and vacuum pump tank trucks.

(i) "Incompatible Pollu ant• - Any polh tant which ·is not a "compatible pollutant" as defined in this Section.

(j) "Major Contributing ·industry" - Any wastewate contributor identified in the Standard Industrial Classification (SIC) Manual in·any- of Divisions A, ,- D,· E nd I that: (1) has a discharge flow of SO , 00 gallons _or more per average work day (if seasonal, the average shall be computed on the period of us·e), or (2) has a _flow or pol luant loading greater than five per cent of the design capacity of SASM's treatment works, or (3) has in its wastes toxic pollutants in toxic amounts as defined in the standards issued under Section 307 (a) of the Federal Water ol lution Control Act Amendments of 1972, _or (4) is found by an Ag ncy's or SASM's authorized representative to have significant i pact, either singly or In combination with other cont'ributing industries, on the treatment works or upon. the quality of effluent from the treatment works.

(k) "Manager" - The manager of SASM or his designated representative.

(l) • Mass Emission Rate" - The weight of material discharged to the community sewer system during a given time interval. Unless otherwise specified, the mass emission rate shall mean pounds .per day of a particular....constltuent or combination of constituents.

(m) "Person" - Any individual; firm, company, partnership, association, and private, public and municipal corporations· responsible corporate officer, the United States of America, the State of California, districts and all political subdivisions, governmental agencies and mandatories thereof.

(-n_) ."Pollution" An alteration of t e quality of the Waters of the State by waste to a degree which unreasonably affects such waters ·tor beneficial use or affects the facilities which serve such _beneficial uses. Pollution may include cont mination •

(o "Premises" - A parcel o real estate or portion ther of including any· improvements thereon which is dete rriined y an Agency or.· . SASM t . be a single user for purposes of rec iving, us_ing, and pay_ing for service.

(p) "Reclaimed Wate [11]- Water which·, as a -result of treatment of waste,· is suita le for direct beneficial use or a controlled use . that would, not. otherwise '·occur. ·'.

(q) [11]SASM[11]- The Sewera e Agency of Southern Marin.

(r) "Treatment Works" Any devices· and systems used in the t _rage treatment, recycling, and reclamation of municipal sewage or industrial wastes. of a liquid nature or necessary to recycle or reuse water at the most economical cost over the useful Ufe of the works, including intercepter s·ewers, outfall sewers, sewage c_ollection systems, pumping, p wer, and other equipment ·and appurtenances; extensions, improvements, remodeling, additions and alterations thereof; elements essential to provide a reliable recycled supply such as standby treatment units a d clear well facilities; and any works, including site ·acquisition of the land that will be an integral part of the treatment p ocess· or is use for uitimate disposal of residues resulting from such treatment; or ny other method· or system for preventing, abating, reducing, storing, treating, separating

or _dis s :_"._g of muni ipal waste, including storm water run-off, or industrial waste, including waste in combined storm water and sanitary sewer systems.

(s) "Unpolluted Water" - Water to which no constituent has been added, either intentionally or accidentally, which wo.uld r n er such water unacceptable to the Agency having jurisdiction th reof for disposal to storm or natural drainages or directly to surface . waters.

(t) "User" - Any person that discharges, causes or p_ertnit$. the discharge of wa tewater into a community. sewer.

(u) "User Classification" - .A classification of user, based on-the 1972 ·edition fo the tandard lndustria_l Classification (SIC) Manual prepared by the ·Executive Office of Management ·and Budget.

(v) [11] Wa s t e [11] ln<;;h;Jde sewag and any and all other waste substa <;es, liquid, ·solid, gaseous, or radioactive, assodated with hum n habitation, or of human or· animal origin, or from any producing, manufacturing, or processing operati ,:i of whatever nature, ·including such waste placed within containers of whatever nature prior to, and for purposes of, disposa•l

.(w) "Wastewater" - Waste and water, whether treated or untreated, discharged into or permitted to enter a community sewer

ex·) "Wastewater Constituents and Characteristics" - The individual chemical,- physical, bacteriological and radiological parameters, including volume and flow rate and such other parameters that serv to define, classify or measure the contents, quality, . quantity and strength of wastewater.

(y) W ters of the State" - Any ·water, surface ·or underground, including saline waters within the boundaries of the State.

Ak1ICLE II

REGULATIONS

SECTION **2.01** Prohibitions on Discharges. -No person shall di.scharge·· astes -to a community sewer which cause, threaten to cause, r are capable of causing either alone or by interaction with other substanc.es:

(a) A fire or explosion;

(b) Obstruction of flow or injury to -the treatment works;

(c) D nger to life or safety of personnel;

·(d) A strong ·o fensive odor or prevention of the effective maintenance or operation of the treatment works;

(e) Air polluti n by th_e ·release of toxic or malodorous gases or malodorous g s-producing substances;

(f) Interference with the wastewater treatment process; .

(g) . SASM's effluent or any ot_her product of the treatment process, residues, sludges, or scums, to be nsuitable of reclamation and reuse or to interfere with the reclamation process;

{h) A detrimental environmental impact or a nuisance in the Waters· of the State or a condition unacceptable to any public agency having regulatory jurisdiction over SASM;

(i) Discoloration·or any other conditi n in the quality of SASM's treatment works effluent such that receiving water quality requirements established by law cannot be met;

(j) Conditions at or near SASM's treatment works which violate any statute or any rule, regulation, or ordinance of any public agency or State or Federal regulatory body;

(k) Cause SASM's treatment works to be overloaded or cause excessive Agency collection or treatment costs, or may use a disproportionate share of the Agencyts capacity;

(I) Containing solid materials that will interfere- with the maint nance or operation of the tr:eatment process;

(m) Having temperature igh enough to inhibit •biological activity in the treatme·nt process or to int rfere with other. operation or . - mainten·ance functions.

SECTION 2.02 Prohibitions on Storm Drainage and (jroundwater. Storm water,. gro ndwater ,.· rainwater, stree qrainage, subsurface drainage or yard -drainage shall not be discharg d _through direct or indir·ect :connections to· a community sewer un ess a permit is i su d by SASM. SASM may approve the discharge of such water only when no reasonable alternati e methpd of disposal is available.

If a permit_ is granted for the discharge of such water into a community sewer, the user shall pay the applicable charges and fees and meet such other conditions as required by SASM.

SECTION 2.03 Prohibition on Unpolluted Water. Unpolluted water, includfng, but not I imited to cooling water, process water or blow-down from ·cooling to ers or evaporative cooler shall not be discharged through direct or indirect connection to a community sewer unless a permit is issued by the SASM. SASM may approve the discharg _of such water only whE;m no. reasonable alternative method of dispo·sal is available.

If a permit is. granted for the discharge of such water into a _community . sewer, the user shall pay the app icable charges and fees and shall meet such other conditions as required by SASM.

SECTION 2.04 Limitations on Radioactive Wastes. No person shall discharge or cause to be discharged, any radioactive waste into a community sewer except:

(a) When the person is authorized to use radioactive materials by the State Department of Health or other governmental agency empowered to regulate the use of radioactive materials, and;

(b) When the waste is discharged in strict conformity with current California Radiation Control Regulations (California Administrative Code, Title 17) and the Atomic Energy Commission regulations and recommendations for safe disposal, and

(c) When the person is in compliance with all rules and regulations of all other applicable regulatory agencies.

SECTION 2.05 Limitations on the Use of Garbage Grinders. Waste from garbage grinders shall not be discharged into a community sewer except:

(a) Wastes generated in preparation of food normally consumed on the premises, or

(b) Where the user has obtained a permit for that specific use from SASM, and agrees to undertake whatever self-monitoring is required to enable SASM to equitably determine the charges and fees based on the waste constituents and characteristics

Such grinders must shred the waste to a degree that all particles will be carried freely under normal flow conditions prevailing in the community sewer. Garbage grinders shall not be used for grinding plastic, paper products, inert materials, or garden refuse.

SECTION 2.06 Limitations on Point of Discharge. No person shall discharge any substances directly into a manhole or other opening in a community sewer other than through an approved building sewer unless he has been issued a permit by SASM. If a permit is issued for such direct discharge

the user shall .pay the applicable"' charges and fees and shall meet such· other co_nditions as required by **SASM**

SECTION 2.07 Holding Tank Waste. No person shall discha_rge any holding tank waste into a community sewer unless he has been issued a permit by SASM. Unless otherwise allowed by SASM under the terms and conditions of the permit, a separate permit. must be sec.ured for each separate discharge. This permit will state the specific location of discharge, the time of day. the discharge is to occur, the volume of the discharge ·and the wastewater constituents and characteristics. If a permit is grar:'t d *fo.r,* discharge of such waste into a community sewer., the user shall· pay t_he. applicable charges nd fees and• shall meet such other condit_ions a required by SASM. An exception to the above .is that no permit wiH be requireq. · for discharge of domestic wastes from mobile home holding tanks provided that such ·discharges are made into a SASM approved facility designed to receive such wastes.

SECTION 2. 08 Limitations on· Wastewater •Streng.th.

SECTION 2.08.1 No person s.hall discharge wastewater containing in excess of:

0.1 mg/I arsenic
0.2 mg/I cadmium
2.0 mg/I copper
1.0 mg/I cyanide
1. 0 mg/I lead
0.01 mg/I mercury
1.0 mg/I nickel
0. 2 mg/I silver
0.5 mg/I total chromium
3.0 mg/I zinc

SECTION 2.08. 2 No person shall discharge any wastewater:

{a) Containing more than. 300 mg/I of Oil o,:- .Gr ase of animal or vegetable origin.

(b) Containing more than too· mg/I of Oil or Grease of mineral ·or petroleum origin.

(c) Having a pH lower than 6. o.

(d) Containing {n excess of 0.02 mg/I total identifiable chlorinated hydrocarbons which cannot be reinov..ed by SASM's wastewater treatment process.

(e) Containing in excess of 1.0 mg/l·phenolic compounds which cannot be removed by SASM's wastewater treatment _process.

SECTION 2.08.3· ffluent limitations promulgated by the Federal Act shall apply in any instance where they are more stringent- tt1an those in this Ordinance. Under Section 307(b) of the Act, Federal pretreatment standards are designed to achieve two purposes: (1) to protect the operation of publicly owned treatment works, and (2) to prevent _the discharge of pollutants which pass through such works inadequately treated. Users in industrial c tegories su je.ct to efflu nt ·guidelines is_sued under Section J04(b) of the Act, which are di charging incompatible pollutants to publicly owned treatment works, are required to adopt best practicable control technology currently available, as defined by the Adm.inistrator pursuant to Section 304(b) of the· Act. Where SASM's treatment works was designed to and does achieve substantial removal of pollutants other than the four pollutants listed in the definition for compatible pollutants in Section 1.02f (BOD, su pende.d solids, pH·, and fecal coliform bacteria), SASM may, at its discretion, not require the user to ,achieve best practicable control technology currently available, since this would lead to an_ uneconomical duplication of treatment facilities. While the term "substantial removal" is not subject to precise definition, it generally contemplates removals in the order of 80 per cent or greater. Minor incidental removals in the order of 1O to 30 per cent are not considered "substantial." For some industrial categories It ay be necessary to define pretreatment guidelines for problems that may arise as a result of the discharge into SASM's. treatment works. However, any adjustments required for particular industrial categories should be considered in connection with SASM's requirements rather than in the national pretreatment standard.

(a) If SASM determines th.at the limitation in Sections 2.08.1 and 2.08.2 may not be sufficient to protect the operation of the SASM's treatment· works, or

.(b) If SASM determines· that the limitations in Sections 2 .08.1 and 2.08.2 may not be sufficient to enable SASM's treatment wqrks to comply with water quality standards .or effluent limitations.· specified in SASM's National Pollut nt Discharge Elimination System (N PDES) permit.

SECTION 2.09 Disposal of Unacceptable Waste. Waste not permitted to be discharged into the community sew r must be t ansported to:a State approved disposal site. The required "Waste Haule,rs Report" must be completed and a copy furnished within 30 d ys to SASM by the discharger.

A"RTICLE 111

DISCHARGE REPORT, WASTEWATER DISCHARG-E PERMITS, AND ADMINISTRATION

SECTION 3.01 Discharge Reports. SASM may"require that any person discharging or proposing to discharge wastewater ioto a community sewer file a periodic Discharge Report. The Discharge Report may include, but not be limited to, nature of process, vol me,_ rates of- _fl w, mass emi· ion rate, production quantities, hou_rs of operation, number and classification of emp_loyees, or other information which. relates to the generation of waste including wastewater discharge. Such repo.rts may also .include _the chem.ical constituents and q antity of liquid or gaseous _materials stored on site even though they are not normally discharged. In addition to Discharge Reports, the Agency may require information in the· form of Wastewater Discharge Permit applications and self-monitoring reports.

SECTION 3.02 Wastewater Discharge Permits.

SECTION 3.02.1 Mandatory Permits. Each "major contributing· industry" as·defined in Section 1 .02 or other users with a discharge. equivalent to that of a major contributing industry, if not conr:,e ted to a community sewer, must obtain a Wastewater Discharge Permit before connecting to or discharging into a community sewer •. Each currently connected "major contributing i nd us t ry[11] or equivalent user m_ust obtain a Wastew ter Discharge Permit within 90 days after the effective date of this Ordinance.

SECTION 3.02.2 Optional Permits. The Manager may issue a Wastewater Discharge Permit to any user, upon appl ica_tion ,_ in accordance with the terms of this section in the following categories.

(a) A user who requests charges arid fees to be based on an estimate of wastewater flow, or

(b) Any user whose wastewater strength is less than the normal range for the user classification to which_ he is assigned because of pretreatment, process changes or other .reasons.

S·ECTION 3.02.3 Permit Application. Users .seeking a _Wastewater Discharge Permit ·shall complete and file with the Manager, an application in the· form prescribed by the Manager, and accom.pani·ed by the applicable fees. The applicant may be require. to submit, in units· and terms appropri.ate for evaluation, the foflowing information.

(a) Name, address, and SIC number of applicant;

(b) Volume of wastewater to be discharged;

(c) Wastewater constituents and characteristics including but not limited to those mentioned in Sections 2. 08 as determined by a· laboratory approved by SASM;

(d) Time and duration of discharge;

(e) Average and 30-minute peak wastewater flow rates, including daily, monthly, and seasonal variations if any;

(f) Site plans, floor plans, mechanical and plumbing plans, and details to shown all sewers and appurtenances by size, location, and elevation;

(g) Description of activities, faci I ities and plant processes on th premises including all materials,· processes and types of materials which are or could be discharged;

(h) Each product produced by type, amount, and rate of production;

Ci) Number and type of employees, and hours of work;

(j) ·. Any -other inform·atibn as may be deemed by the Manager to be necessary to evaluate the permit application.

The Manager will evaluate the data furnished by the user and may require additional information. After evaluation and approval of all the data requ·ired, the Manager may issue a Wastewater Discharge Permit subject to terms and conditions provided herein.

SECTION 3.02.4 Permit Conditions. Wastewater Discharge Permits shall be expressly subject to all provisions of this Ordinance. nd all other ordinances, regulations, charges and fees established by SASM•. The conditions of Wastewater Discharge Permits shall be uniformly enforced b_y the·_Manager in accordance with this Ordinance, and applicable State and ·Federal regulations. ermits may contain· tf:le following: .

(a) The unit cf:large or. schedule of c arges and fees for the · wastewater to be discharged to a co munity sewer;

{b) The a erage and maximum wastewater constituents and characteristics;

(c) Limits .on rate and time of discharge or req irements for flow regulations and equalization; .

(d) Requirements for installation of inspection and sampling facilities;

(e) Pretreatment requirements;

(f) . Specifications·for monitoring programs which may• include sampling locations, frequency and method of s J>li g, nuthber, types and standards for tests and repor-tin•g schedule;

.(g) Requirements for ·submission of technical" reports ·or discharge reports;

· (h) Requirements for maintaining plant records relating to wastewater discharge as speci.fied by SASM, and affording SASM access thereto;

(i) Mean and maximum mass emission rate , or other appropriate limits when incompatible pollutants (as defined by Section 1 .02j) are proposed or present in the user's wastewater discharg_e.

(j) Other- conditions as deemed appropriate by SASM to in-sure compliance· with this Ordinance.

· ·SECTION 3.02.5 Duration of Permits. Wastewater Discharge Permits shall _be issued for a specifie·d time perio , not t exceed fi e (5) years. A _Permit may · e iss_ued for a period less than a ·year or may. be stated to expire on a specific date. Jf the user is not notified by the Agency 30 days prior to the expirati n of_ the Permit, the Permit shall be extended one additional year. The terms and conditions of the Permit may be subject to modification and change by SASM during the life of the Permit as limitations or requirements as identified in Section .08 are modified and changed. The user shall be informed of any proposed changed in his Permit at least 30 days prior to the ·effective date of. change. Any changes or new conditions in the Permit shall include a reasonable time sched_ule for compliance.

SECTION 3.02.6 Transfer of a Permit. Wastewater Discharge Permits are issu_ed to a specific user for a specific operation. A Wastewater Discharge Permit shal I not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation.

S_ECTION 3:.02.7 Revocation of Permit. Any user who violates the conditions of the Wastewater Discharge Permit,· any provisions of this Ordinance, applicable State and Federal regulations, or any of the following, is subject to having his _Permit revoked:

(a) Failure of user to factually report the wastewater constituents and characteristics of his discharge;

(b) Failure of the user to report significant changes in operations, or wastewater constituents and characteristics; or

(c) efusal of reasonable access to-the user's premises for the purpose of inspection or monitoring.

SECTION 3.03 Monito'ri_ng Facilities. Users who propose to discharge, or . who in the judgement of SASM could discharge now or in the future, wastewater with cons,ituents and characteristics _different from that produced by a· domestic premise may be required to install a mon.itoring facility.-

When more_ !ha one user can discharge into a co mon building s e_r, SASM may require· insta_ll tion of a separate monitoring facili'ty for each ·. user. Also whe91, in the judgment of SASM, there is a significa'1t difference in wastewater constituents and characteristics pro uced by different operations of a single u er,- SASM may require_ that separate monitoring facilities be installed *for* each separate d scharge.

Monitoring facilities that are required to be installed shall be constructed, operated ·and maintained at the user's expense. The purpose f the facility is to enab e inspection, sampling and flow measurement of wastewaters produced by a user. If sampling· or metering equipment is als·o required by SASM it sh II be provided, installed, and operated at the user's expense·. The monitoring fadlity will normally be required to be located on the user's premises outside of the building. SASM may, howe.ver, when SlJCh a location. would be i practical or cause undue hardship on the user, allow the facility to be constructed in the public street or sidewalk area·, .with the approval of the publ le agency having juris iction over that street or si.dewalk, and _located so that it will not be obstructed by landscaping or parked· vehicles.

If the mon"itoring facility is insidEtthe user's fence, there shall be accommodations to al low safe and im_mediate access for SASM personnel, such s a gate secured with a. SASM lock. There shall be· ample room in or near . such facility to allo accurate sampling and compositing o.f samples for analysis. The.entire facility_and the·sampling and measuring eq ipment shall be maintained at all times in a safe and proper operating condition by and at the expense of the user.

Whether constructed on public or private property, the monitoring fac_ilities shall be constructed in accordance with SASM's requirements and all appl icab_le lo_cal construction standards an specification•s

When, in the judgment of SASM, an existing user requires a monitoriAg facility, the user w II be so notified in writing_. Construction must be completed within 90 days fopowing· written notificati9n t:inless. a tim · extension is otherwise granted by SASM_.

SECTION 3.0LI Inspection and Sampling. SASM may inspect the facilities of any user to ascertain whether the purpose of this Ordinance is being met an<:t al I requirements are being complie with. Persons or occupants of premises where wastewater is created .or discharged shall allow SASM or its representative ready access at all reasonable times to all parts of the premises for the purposes of inspection or sampling or in the performance of any of their duties. SASM shall have the right ·to 'set up on the user's property such ·devices as are necessary to conduct sampling or r.,etering opera_tions. Where a user has security mea ures in force which would require proper identification and clearance before ntry into their premises, the user shall make necessary arrangements with their security guards so that upon pres ntation of uitable identif! ation, personnel from SASM will be permitted to enter without delay for the purposes of performing their speci fie responsibl ii ities.

SECTION 3.05 Pretreatment. Users shall make wastewater acceptable under the· limitations established herein before discharging into any com · munity sewer. Any facilities required to pretreat wastewater to a lev I acceptable to SASM shall be provided and ma_intained at the .user's

expense. Detailed plans showing ttie pretreatmen facilities ·and opef".'ating· procedures shall be submitted to SASM for review, and shall be approved by the Agency before construction of the facility. The review and approval of such plans and operating procedures will in no way relieve t e . user from the responsibility of modifying the facility as necessary to produce an effluent complying with the provi.sions of this Ordinance. Any· subsequent changes in the pretreatment facilities or method of. operat on - shall be reported to_ and be approved by SASM.

SECTION 3.06 Protection from Accidental Discharge. Each user shall provide protection from accidental discharge of prohibited_ m·aterials or ·· other wastes regulated by this Ordinance. Facilities .to prevent accidental discharge of prohi.bited materials shall be provided and maintained ·at the user's expense. Detailed plans showing_ facili ies and opera_ting procedures to provide -this protection shall be submitted to SASM for review, and shall be approved t;>v SASM before construction of the facility:

The review and approval of such plans and operating procedures will in no way relieve the user from the responsibility of modifying the facility as necessary to provide the protection necessary to meet the requirements of this Ordinance.

SECTION 3.07 Confidential Information. All information and data on a user obta in d from reports, questionnaires, permit applications, permits and monitoring programs, and from inspections sh II be available to the public or any other governmental agency without restriction unless the user specifically requests and is able to demonstrate to the satisfaction of **S_ASM** ·that the release of such information would· divulge. information, proc_esses or methods which would be detrimental to the users' competitive position.

When requested by the person furnishing a report, the portions of a report which might disclose trade secrets or secret processes shall not be made available_ for inspection by the public but shall be made available .to governmental agencies for _use in making studies; provided, however, that such portions of a report shall be available for use by the state or -any

state agency ir:i judicial review or enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics Will not be recognized as confidential information.

Information accep ed by ASM as confidential, shal I not be transmitted to any governmental agency or to the general public by SASM until and· unless prior and adequate notification is given to the user.

SECTION 3.08 Special Agreements. Special agreem_ents and arrangements. b tween SASM and any person or agencies may be established when in the opinion of SASM unusual or extraordinary circumstances compel speci I terms and conditjons. Special a greem nts will only be entered into provided they conform to state· and federal requirements.

SECTION 3.09 Plans for and Inspection of Sewerage· Construction. Plans for sewerage constr_uction shall meet a·II design requirements of the Agency having area jurisdicti n and shall also meet the de ign requirements as es tab I ished from time to time by the Engineer of SASM

Inspection of all sewerage construction shall be made by personnel of the Agency in the manner described in the rules and regulations pertaining thereto.

ARTICLE IV

ENFORCEMENT

SECTION 4.01 Accidental Discharges.

SECTION 4.01.1 Notific.ation .of Discharge. Users shall notify SASM immediately upon accidentally discharging wastes iri violation of this Ord_inance to enable countermeasures to be taken by SASM to minimize damage to the community sewer, treatment facility, _treat'!)ent pro esse and the receiving waters.

This notification shall be followed, within 15 days of the date of occurrence, by a detailed. written statement describing the ca ses of the accidental discharge and the measures being taken to prevent future occurrence.

Such notification will not relieve users of liability for any expense, loss or damage to the sewer system, treatment plant, or treatment process, or for any fines i·mposed on SASM on account thereof under Section 13350. of the California Water Code or for violations of Section 5650 of the California Fish and Game Code.

SECTION 4.01.2 Notices to Employees. In order that employees of users be informed of SASM requirements, users shall make available to their employees copies of. this Ordinanc together with such other. was ewater information and notices wh.ich may be furnished by SASM from time to time directed toward. m9re effective water polluti.on control. A notice shall be furnish d and permanently posted Or the user's bulletin board advising -employees whom to call in case of an accidental discharge in violation of t is o·rdi.r:,ance.

SECTION 4.01.3 Preventive Measures. Any direct or indirect connection or entry point for persistent or deleterious wastes to the user's plumbing or drainage system should be eliminated. Where such

.action is impractical or unre sonable the user shall appropriately la.be) such entry pqints to warn against discharge of such wastes in violation of this Ordinance.

SECTION 4.02 Issuance of Cease and Desist Orders. · When the Agency finds that a discharge of wastewater h_as taken place, in violation of. proh_i-bi tions or I imitations of this Ordinance, or the. provisions of ·a Wastewate_r Discharge. Permit, the Manager may issue an order to cease and des s , · · and direct that those persons not complying. with ·such prohibitions, limits requirements, or provisions to:

(a) Comply forthwith;

(b) Comply in accordance with a time schedule set forth by the Agency, or

(c) · Take appropr.iate remedial or preventive action in the event of a threatened violation.

SECTION 4.03 Submission of Time Schedule. When SASM finds that a d_ischarge of wastewater has been taking place, in violation of prohibitions or I imita ions prescribed in this Ordinance, or wastewater source control requirements, effluent limitations or pretreatment standards, or the provisions Qf a Wastewater Discharge Permit, SASM may require the user to· submit for approval, with such modification as it deems necessary, a detailed time schedule of specific actions which the user shall take in Qrder to prevent or correct a violation of requirements.

SECTION 4.04 Appeals. Any user, permit applicant, or permit holder affected by any decision, action, or determination, including Cease and Desist Orders, made by the Manager, interpreting or implementing the provisions of this Ordinance or in any permit i sued herein, may file with the Manager a written request for reconsideration within 1O days of such d.ecision, action, or determination, setting fo"."th in detail the facts supporting the user's request for reconsideration.

If the ruling made by the Manager is unsatisfactory to the person requesting reconsideration, he may within 10 days after notification of SASM action, file a written appeal to SASM's governing body. The written appeal shall be heard by the governing body within 30 days from the date of filing. SASM's governing body shall make a final ruling on the appeal within 15 days of the close of the meeting. The Manager's decision, action, or determination shall remain in effect during such period of reconsideration.

ARtlCLE V

ABATEMENT

SECTION 5.01 Public Nuisance. Discharges of w stewater in any manner in violation of this Ordinance or of any order issued by the Manager as. authorized by this Ordinance, is hereby declared a public nuisance and shall be corrected or aqated as' dire ted by. the Manager_. Any person · . creating a public nuisance shall be subj ct to provis.ion_s of Agency code or ordinances governing such nuisance.

SECTION 5.02 Injunction. Whenever a discharge of wastewater is in violation of the provisions of this Ordinance or o herwise causes or threatens to cause a c_ondition of contamina jon, polluti n o-r nuisance, SASM may petition the Superior Court for the issuance of a prelimin ry or permanent injunction or both, as may be appropriate in restraining the continuance of such discharge.

SECTION 5.03 Damage to Facilities·. When a discharge of wastes causes an obstruction, damage, or any other impairment to SASM facilities, SASM may ass ss a charge against the user for the work required to clean or repair the_ facility and add such charge to the user's sewer service charge.

SECTION 5.04 Corr.ection of Violations; Collection of Costs; Injunction. In order to er:aforce the provisions of this Ordinance, the Agency may correct any violation hereof. The cost of such correction may be ad ed to any sewer service charge payable by the person violating the Ordinance or the owner or tenant of the property upon which the violation occurred, · and SASM shall have such remedies for the collection of such costs as it. ·has fQr the collection of sewer service charges. SASM may also petition· the Superior Court for the issuance of a preliminary or permanent injunction, *or* both, as may be appropriate, restraining any person from the -- continued violation of this Ordinance.

SECTION 5.05 · Civil Liabilities and Penalties. Any person who intentionally or negligently violates any p_rovisi n of this Ordinance, r quirernents, or conditions set forth in permits duly issued, or who discharges wastewate which causes pollution, or violates any cease and desist or er, prohibition, effluent limitation, national standard of performance, pretrea.tment or tQxicity standard, shall be liable civilly to liabilities imposed by SASM against which the vio.lation occurs. S id civil liability may· be in a sum of· not to exceed six thousand dollars ($6,'000) fqr each day in which such· ... violation occurs.

SASM may petition the Superior Court to impose, assess and recover· s·uch sums. In determining such amount, the court shall take into consider tion all relevant ci rcumsta·nces, including, b':'t *n9* limited ·to, th extent of harm caused by the violati<;m, the .nature and ·persistence of the violation, the length of time over which the .violation occurs, ·and corrective action, if any.

-SECTION **5.06** Falsifying of Information. Any person who knowingly makes any false statements, represen.tation record,· report, plan or other document filed with SASM or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Qrdinance, is_ hereby declared t be in vi.olation of this Orqinance, and subject ·to the Civil Liabilities imposed under Section' 5.05 of this Ordinance, or subject o prosecutio and punishment under Section 5. 06 of this Ordinance.

SECTION 5.07 Termination of Service. In order to effect its powers, SASM ·or the appropriate member Agency may enter upon private property for the p·urpose of inspection and maintea:.iance of sanitary and waste di posal facilities and may terminate service to propert'y in which a violation - of any rule, regulation, or this Ordinance is found to exist.

Prior to termination of service,. however, the SASM Board $hall notify, in writing, the owner and. tenant, If any, of such property that service is intended to be so terminated and conduct a hearing theron as heref n provided. Such notice shall be mailed to the owner at the address

shown on the rec<;>rds of the Assessor of ,the County, or as known to the Clerk, and.a copy ·shall be delivered to the tenant o.r posted conspicuously on the property. The notice shall .stat.e the date of proposed termination of service and the reasons therefor and the date the SASM Board shal l hold a hearing upon such intended termination. Such hearing shall not be held le_ss than ten days subsequent to the giving of notice as herein required.

ARTICLE VI

SEVERABILITY

If any provision of this Ordinance or the application to any person or circumstances is held invalid, the remainder of. the Ordinance or the application of such provisions · to other·· persons or other circumstances shall not be affected.

ARTICLE VII

AMENDMENT.S .AND MODIFICATIONS

The Agency may, from ti e to time, modify the provisions of this Wastewater Discharge Ordina11ce for any reason the Agency deems appropriate. Any changes. shall be complied with y any person that is currently or beginning discharging to the treatment w9rks.

Bertram L. Davies
President
Sewerage Agency of Southern Marin

Countersigned:

- L;:e
Secretary

(Seal)

.1 hereby c.ertify that the foregoili 'is a full, true, and cor-rect copy of an.· ord.inance which was duiy and regularly passed and adopted by the Board of Commissioners of the Sewerage Agency of Southern Marin, Marin County, California, at a meeting duly held on the 21st d.Y of April , 19bt following vote of the Commissioners thereof;

AYES, and in favor thereof, Commissioners: Binderup, Davies, Rejn, Robert_s, Sievers and Willat.

NOES, Commissioners: None.

ABSENT, Commissioners:

- vU -414/
Secretary

(Seal)

APPENDIX C

Specifications for Building Sewer Construction

APPENDIX "C"

SPECIFICATIONS FOR BUILDING SEWER CONSTRUCTION

RICHARDSON BAY SANITARY DISTRICT

ALMONTE SANITARY nrsTRICT

Specifications for Installation ·of Building Sewers

All buildi g sewers installed withiQ the District shall conform to the following nimum sta dards and requirements.

I • PROCEDURES·

A. Jurisdiction

_All property to be served shall be within _the· i-dhardson Bay Sanitary District boundaries. The District has jurisdiction over.all private building sewer:s from a point two (2) feet or less.outs-ide the building fou dation to the point of connection to the District sewer system. District jurisdiction includes, bu is not limited to, issuance of p·ermits to construct, specification of design,- type of ma-teria•l and construction requirements as well as nspection and, esting.

B. Ownenhip

All-private sewers, building sewers, or pumping or lift systems from ins-ide the structures to. the point of cQnnectiori to the District system are owned privately and are to be maintained by the owner of the property served.

C. Liability

Tlie n·istrict and it;s officers and. employees shall not be liable for injury or death to any person r d ge to any·property ari ing during, qr growing out of, the performance of any work described in his ordinance.

D. Permit-Required

Prior _to. installation of any ne building sewer .or piumbing alterati,.on, a ·sewet connection permit must be secured from the District Office.

·Note·: New_plumbing or plumbing changes wi.tliin·the building• come under jurl diction of the Town of Tiburon 0 Marin County Building Depart-. ment and·will require a separate p rmit from these agencies.

E. Compliance with Regulations

Ay_person constructing a sewer within a street shall comply with all State, County, or City laws, ordinances, rules and regulations pertaining to the cutting of. pavement, opening, barricading, lighting and protecti.on of trenches, backfilling and repaving thereof and shall Qbtain all permits and pay all fees required by the department having jurisdiction prior to the issuance of a permit by the District. Any

person requesting a permit shall also comply with all applicable guidelines, including the Local Guidelines of District, adopted pursuant to the Environmental Quality Act of 1970, and shall make all deposits required and pay all fees which may be established by the District to process applications to comply with said Act. The plumber must have a co_py of all necessary permits on the job when the building ewer is being constructed.

F. Plan Required

A plan showing the location of the proposed structure and location of the building sewer on the property.shall be furnished to the District at the time the sewer connection permit is issued. The plan shall show the envelope of the building, all easements, and the depth and grade of the proposed building sewer•. The District Inspector · or District Engineer may require a survey by a registered land surveyor or engineer if it is necessary o ascertain the location of property - lines or easements. The p·lumber must have this plan on the job when the building sewer is being constructed.

G. Inspection

All building sewers shall be inspec.ted by the Distr p-t Inspector prior to the backfilling and sh ll be tested for watertightness in the presence of the.District Inspector. Inspections must be arranged twenty-·four (24) hours before the work is to be· inspected, Sundays and holidays excluded. Dis·trict Office shall advise the owner or agent the approximate time inspection will be made· A surcharge of $50 per return inspection shall be charged for return inspections.

B. Location of Building Sewer

It is th responsibility of the property wner or his contractor to locate·a d u-ncover the building sewer or · wye•installed to serve the property. If no building sewer or wye can be found even though the District records indicate such a connection, the building sewer shall be connected to the District system a a location designated by the District Inspector or District Engineer at the expense of the permitee.

I. Main Line Taps

Special permission must be obtained from_tqe District to make a tap or connection to the District s public sewer. · Connection to a public sewer may be permitted oniy after field inspection of the condition by the District Inspector and a finding that no wye or building sewer was installed. Each connection when permitte shall be made only in the presence of and at the direction of the District Inspector. On 6-inch sewei:s, installation 0 a wye will be required; on larger p.ipes, a tap · may by made · using epoxy adhesive to seal the connection. A..Tap Tite" or equal pipe penetration type of connection on sewers larger than 6" may be used upon receiving permission in advance from the District Inspector or District Engineer.

J. Sewage Pumps

Special application must be made for installation of an individual sewage pumps where gravity service is not feasible. All pumping systems shall be installed in accordance with all applicable codes. The District will only inspect the pressure line from the sewage pump to the point of connection to the District sewer system.

K. Service to More Than One Dwelling

Service to more than one dwelling with a single sewer requires either special permission from the District or a separate public sewer main extension as set forth in the Sanitary Code of Richardson Bay Sanitary District.

II. DESIGN REQUIREMENTS

A. Pipe Size

The minimu size of a building sewer serving up to one hundred fifty (150) fixture units shall be 4" inside diameter. The minimum size of a building s wer serving mo.re than one hundred fifty (150) fixture units shall conform to the size requirements for horizon al drainage piping based on fixture unit loading as given in the Uniform Plumbing Code. In no event shall a building sewer connect to a sewer of a lesser size on the downstream side.

B. Minimum Pipe Slope

The minimum grade of a building sewer shall be \-inch per foot (2.0%).

a. Minimum Pipe Cover

The minimum cover over the top of a building sewer shall be:

1. 18 inches within the owner's premises
2. 30 inches within an e sement outside the owner's premises
3. 48 inches within a street right-of-way

Where the above minimum pipe covers cannot be obtained, special pipe bedding and/or concrete encasement may be required by the District Inspector or Engineer.

D. Gravity Sewers

The following are acceptable pipe and joint materials.

PIPE MATERIALS

14-01 Desaiption. Sewer-pipelines sh be stalled as shown on the plans and in accordance with the following provisions, the Special Provisions, and as directed by the District.

14-02 Approved Sewer Pipe Materials. The approved pipe materials for laterals and for private side sewer/lateral construction are listed in Table 1 and approved pipe materials for public sewer mains and force mains are listed in Table 2. The specific use of pipe and pipe products are subject to approval by the District. Use of pipe other than those specified hereinbe]ow must be reviewed by the District and specifically authorized in writing. All pipe shall be of the size, materials, and strength cl_assifications shown on the plans or pecified herein.

TABLEl
PRIVATE SIDE **SEWER/LATERAL**
(Specific Use Subject to District Approval)r

* Pipe Sp cations	Can Be Used for Gravity Sewers	· CanBeUsed = for Ejector Pump Discharge Pipelines .
Vitrified Cay Pipe (No ub), VCP	Yes[1]	No
Cast Iron Soil Pipe (No Hub), CIP	Yer	No
Ductile Iron Pipe w/Rubber Ring Joints, DIP	Yes[1]	No
PVC ASTM D-2241, SDR=26	Yes[1]	Yes[1]
PVC AWWA C-900, SDR=21	Yes[1]	Yes[2]
PVCSch40	Yes[1]	Yes[1]
PVCSch80	Yes[2]	Yd-
Polyethylene, min SDR=17	Yes[1]	Yes[1]

[1] Requires minimum 3-foot cover with imported bedding and pipe zone backfill.
[2] Requires minimum 18-inch cover on private prop rty with imported bedding and pipe zone . backfill or shaded with select native material containing rocks no larger than 1" sieve=·

Pipe Sp cifications can depend on terrain and soil conditions.

Pressure Sewers

The pressure portion of the discharge line shall be:..equal in size to the pump discharge. The pipe shall have a working pressure rating not less than 150 psi•. The test pressure shall be 50 psi.

-III. CONSTRUCTION

A. Laying Pipe

Building sewers shall be laid by the shortest route from the plumbing outlet to the sewer connection. All pipe shall be laid acc ra ely to line and grad·e. Each l ngth of pipe shall be laid on a firm bed as detailed in.Drawing No. 1 .and hall have full bearing for its entire length between bells. An adequate bell hole shall be dug at the end of each pipe · length for making the join . Both pell and spigot shall be clean before the joint. is made and care shall be taken that no foreign materials enters the pipe. Wat ·er shall be pumped from the trench while the pipes ·are laid and the joints made. Backfill shall be carefully and uniformly placed around the pipe, and no rocks or clods allowed to touch the pipe. In rocky areas imported bedding . material may.be required. Pipe shall not be covered until inspected by the District Inspector.

B. Cleanouts

Cleanouts shall be installed at the following locations:

1. A tee or wye fitting shall be installed at the junction of the building sewer at property line. This fitting shall be used for inserting test plug after which it s.hall be.permanently sealed, unless otherwise required.

2. At the junction of the house plumbing and building sewer two (2) feet outside the building.

3. At each bend or change in direction of the building sewer 22-1/2° or over.

4. Where a run of pipe without bends exceeds one hundred (100) feet;

Note: Cleanouts shall be brought to grade, properly capped, and completely watertight.

C. Backwater Valves

The District requires the installation of an approved backwater device. The approved backwater device shall be installed as detailed in Drawing No. 2. The elevation of the backwater valve rim shall be at least twelve (12) inches below the lowest plumbing fixtures. If the building does not have an approved backwater device installed, one shall be installed as a required condition for the issuance of a permit by the District.

D. Testing of Gravity Sewers

All building sewers shall be tested by plugging and filling with water or with compressed air to five (5) psi, as directed by the District Inspector or Engineer. Water leakage shall not exceed one hundred (100) gallons per day per inch of diameter per mile of sewer main being tested (0.3 gallons per hour per 100 feet of 4-inch diameter pipe). When an air test is made, the pressure must not dip over a fifteen (15) minute test period.

E. Testing of Pressure Sewers

Pressure sewers shall be tested under a water pressure not less than the working pressure under which it is used. A one hundred (100) pounds per square inch air pressure may be substituted for the water test. In either method, the piping shall withstand the test without leaking for a period of not less than fifteen (15) minutes.

F. Existing Septic Tanks

When an existing septic tank is being abandoned or when one is encountered during the work, the following procedures should be followed:

1. All building sewers shall completely bypass the septic tank,

2. All septic tanks shall be pumped out and cleaned.

3. All septic tanks shall be filled with crushed rock or pea gravel or otherwise made safe,

4. All septic tanks shall be abandoned per the Uniform Plumbing Code and County Health Department regulations.

The County Health Department shall be notified when a septic tank is being abandoned or is encountered. The County Health Department's standards must also be followed.

G. Trenches for Building Sewers Excavated and Backfilled

Trenches for building sewers with n public streets shall be excavated and backfilled and the pavement restore_d in strict accordance with the laws, ordinances and regulations of the State of California, County of Marin, Town of Tiburon, or any department, authority or agency or either having jurisdiction over such street.

H. Special Conditions

When special construction conditions are encountered-which are not covered in these specifications, the District Inspector or Engineer will direct the permitee in the required procedures.

I. Permit Expiration

If work under a permit is not completed within one (1) year from the date of isssuance, after partial c9mpletion, the permit shall thereupon become void and the fee paid shall be returned to permitee, less a $100 service charge to be retained by the Distr1ct. Further work shall not be done until a new permit has been secured and a new pe;rmit fee paid.

J. Pe.rm.its are Non-Transferable

Permits issued by th District_ shall be for the property for which the permit was issued and shall not be transferred to another property without written approval of the Sanitary District Board. The permit shall show the name of the permitee and shall identify the property by Assessor's Parcei Number.

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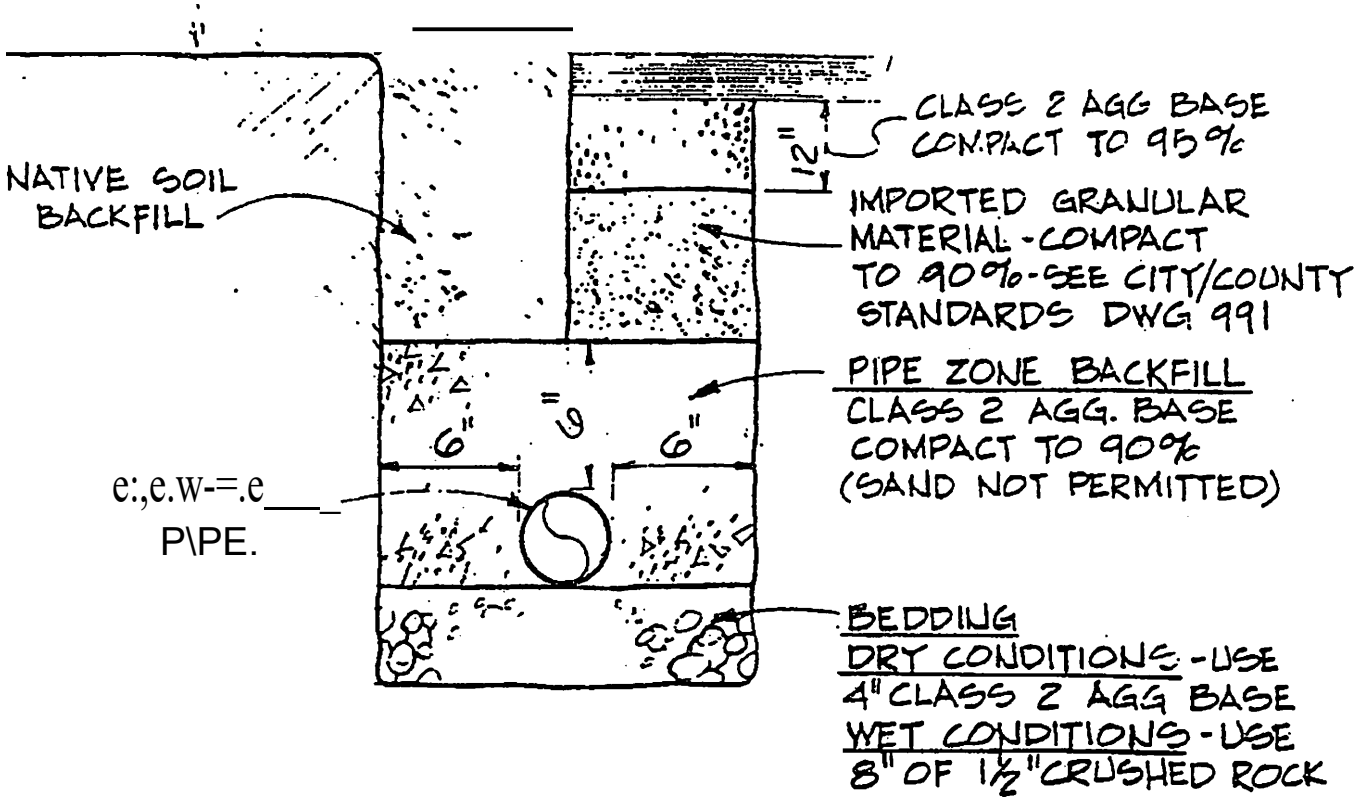

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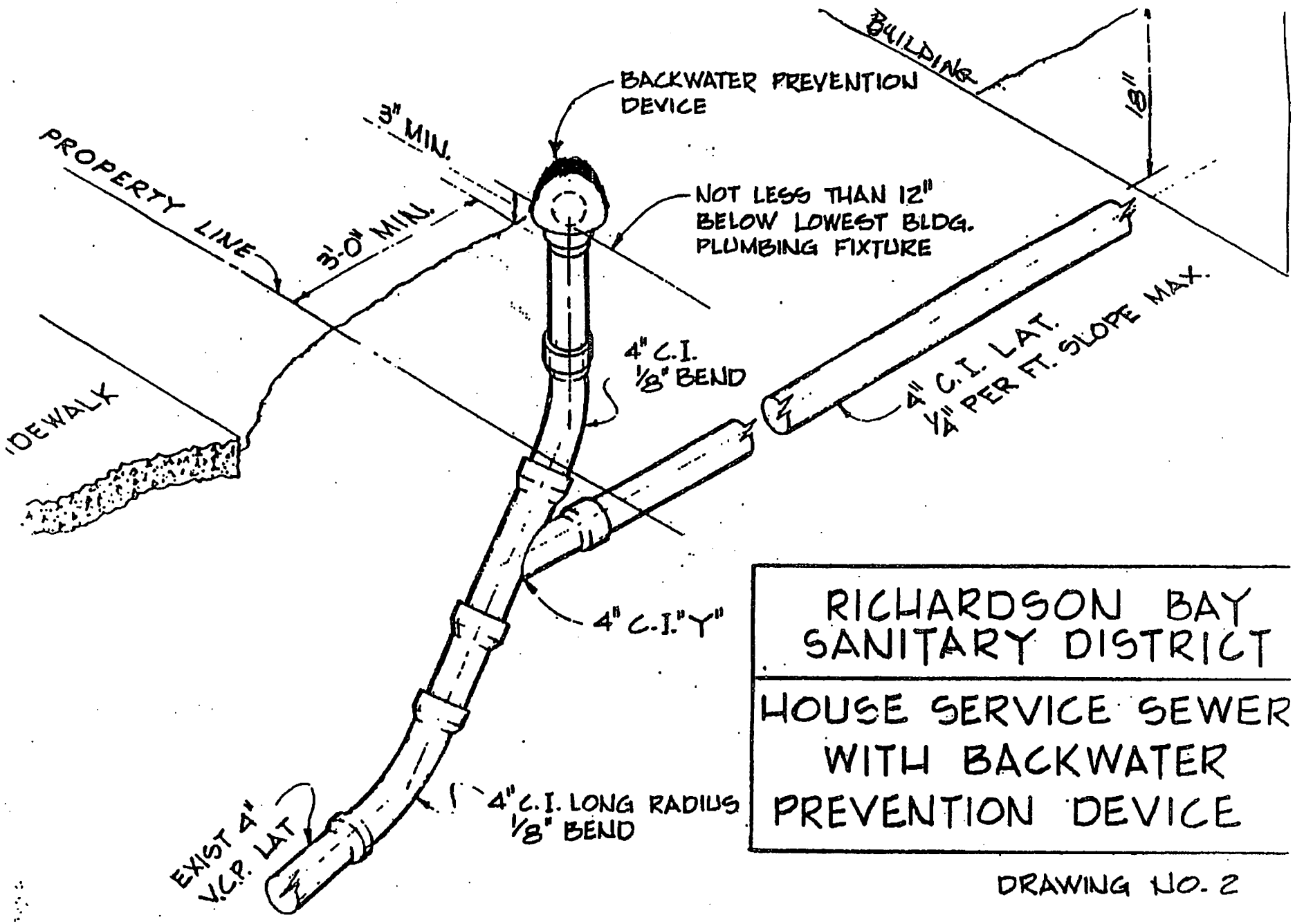
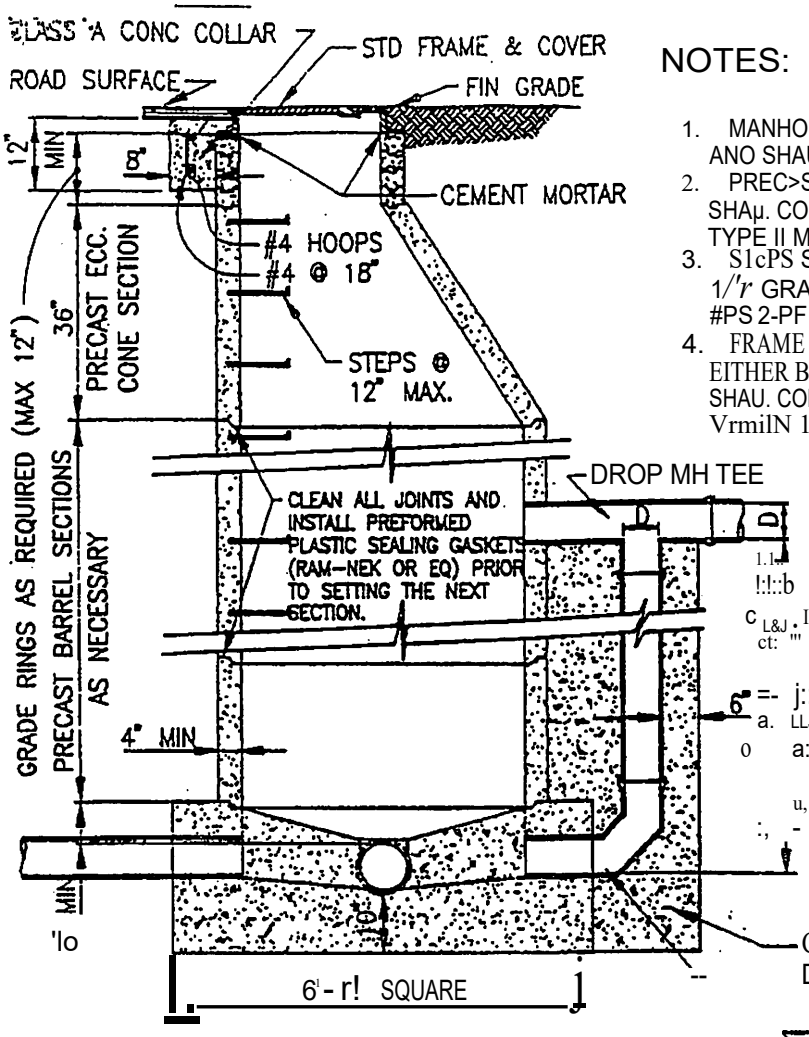
DRAWING NO. 1



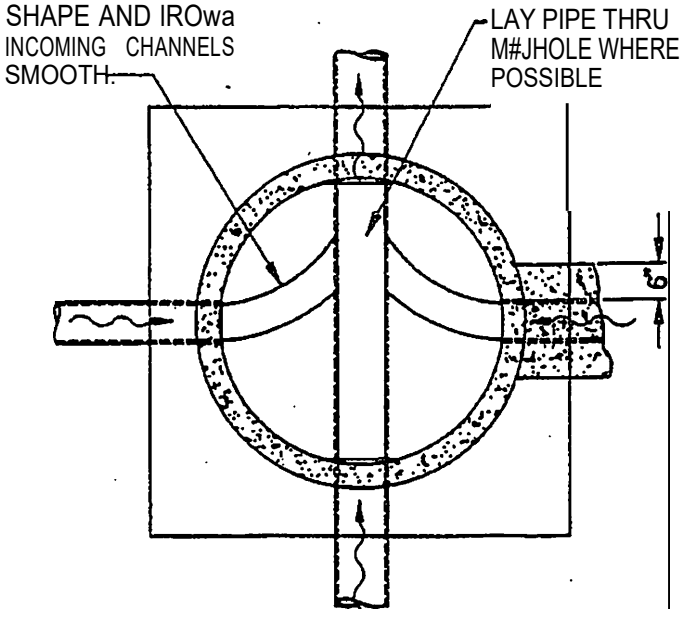
RICHARDSON BAY SANITARY DISTRICT

HOUSE SERVICE SEWER WITH BACKWATER PREVENTION DEVICE

DRAWING NO. 2



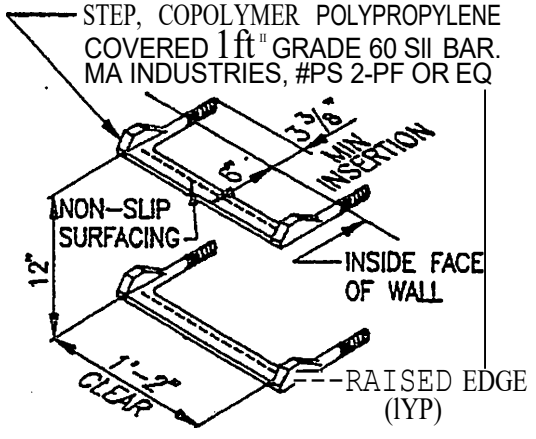
SECTION



PLAN OF BOTTOM

NOTES:

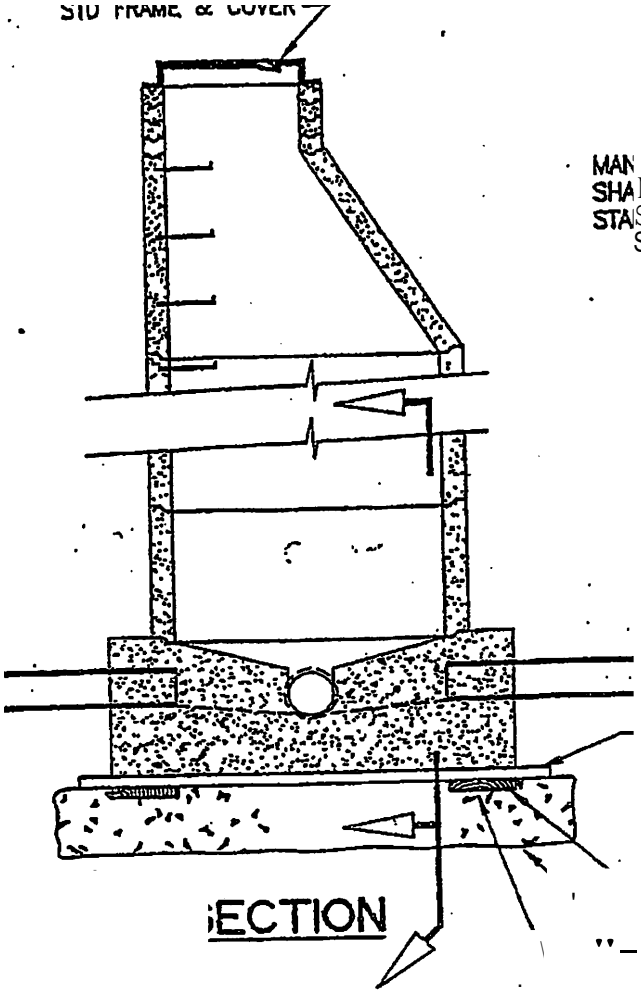
1. MANHOL£ BASE SHAU. BE Cl.ASS A (6-sock) CONCRETE: ANO SHAU. BE POURED AGAINST UNDISTURBED SOIL
2. PREC>ST CONCRETE CONE. BARRa AND GRADE RINGS SHAµ. CONFORM TO A.S.T.M. Spec C-478, EXCEPT TiiAT TYPE II Mod"Ified PORIIANO CEMENT SHAU. BE USED.
3. S1cPS SHALL BE POLYPROPYLENE REINf'ORCED Willi 1/'r GRADE 60 srm BAR)S DETAILED BELOW, #PS 2-PF AS MANUFACTIJRED BY MA INDUSTRJES OR EQ.
4. FRAME AND COVER MAY BE ADJUSTED TO GRADE LEVEL EITHER BEFORE OR AFTER PAVING, *BIJT* ANAL GRADE SHAU. CONFORM TO ADJACOO FINISH PAVEMENT GRADE VrmilN 1/g'.
5. ECCENTRIC CONE SECTION SHAU. BE POSffiONED >S DIRECTED BY THE DIS1RICT.
6. WHERE FRAME AND COVER IS SET *liiiR,* PAVJNG. lHE CONCRm: COUAR SHALL BE BROUGHT TO FINISH GRADE ANO THE EXPOSED CONCREIE SURFACE SHAU.. BE COLORED Ym'H LAMPBLACK.
7. RECESS IN MANHOLE SASE SHM.I. BE FORMED WIIH AN APPROVED METAL FORMING RING TO RECEIVE PREC>ST MANHOL£ JOINT. PRrrORMED PLAS11C ScAL GASKET SHAU. BE INSTALLED BEFORE PLACING ARST BARREL SECTION.
8. PRE MANHOL! **BASES ARE** NOT AU.OWED.



MANHOLE STEPS

RICHARDSON BAY SANITARY DISTRICT
,00 TIBUION BOULEV AJID
, UION. CA 94920

STANDARD DROP MANHOLE



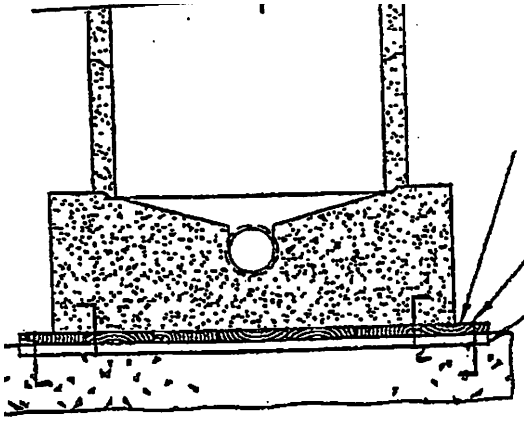
MAN
SHA MANHOLE BASE, CONE ANO BARREL
STA SHALL BE CONSTRUCTED PER
STANDARD DEJAIL SO 2.0

7 . 2• x 12• REDWOOD PLANKS,
SPIKED THRU Ct.EATS W/ MINIMUM
OF 3- f16 H.D. GALV. SPtKES EA ENO

2 - 2"" x 12 REDWOOD CIEA1S _

12• QUARRY WASTE ROCK, OR
·12a - 1½•ROCK IN WET CONOrllONS.

--FORM GROOVES IN CLASS II MATERIALS
FOR ·aorroM. CLEA.7S ON COMPACTED
MATERIAL



— REDWOOD PLANKS r-tl'\A-r

tAY BOO SPIKES· 1YP EACH END
UNTO ROCK AND CONCRETE FORM
REDWOOD CLEATS

SECTION

MARµ'i COUNTY,CALIF ORNIA

. MANHOLE BASS
IN BAY MUD

1996

BARE GROUND:

MOUND NATIVE SOIL (TYPE A)

LANDSCAPED AAEk PLACE TOP SOIL IN UPPER 12•.

TRAVEL SURFACE: PLACE 12• *CLASS* II AGG BASE.

FIN. GRD.

L LANDSCAPING RESTORE ALL LANDSCAPING IMPROVEMENTS

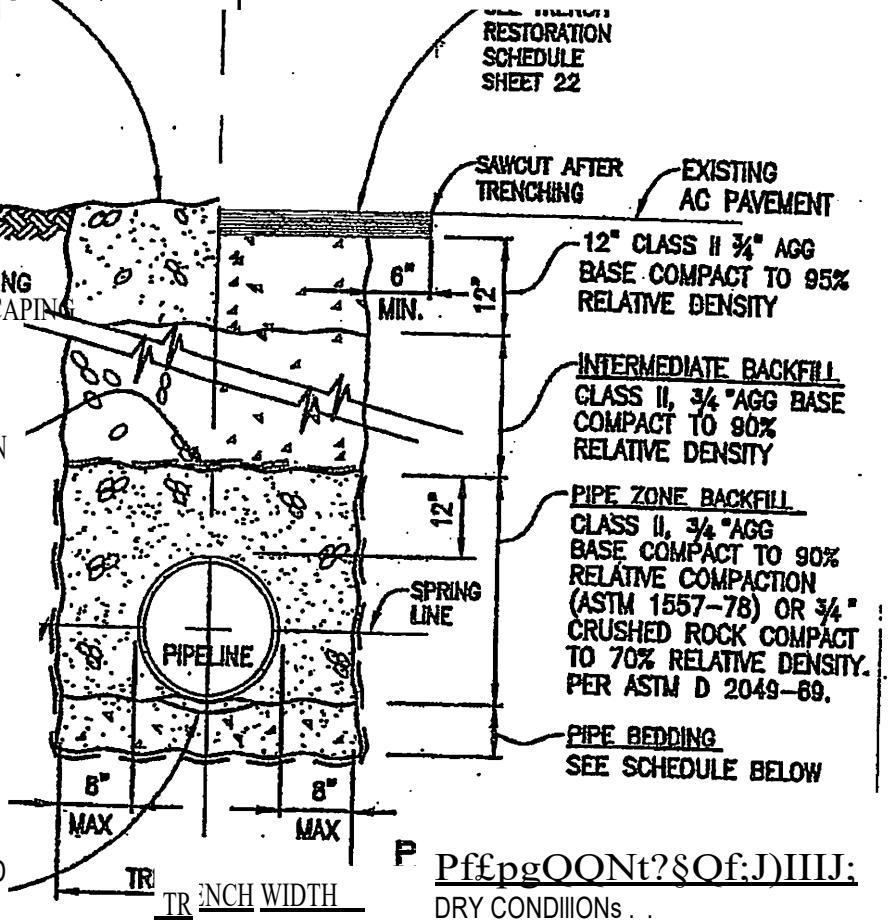
·Pusnc MErAt.Uc DETECTION TAPE · **SANITARY SYSTEM** GREEN COLOR COOED ---

SPECW.. PIPE BEDDING DETAIL (SEE NOIE 1 ·ntlS SHEEI) GEOTEX111.£ FIL1ER **FABRIC MIRAFI** *100* OR APPROVED EQUAt!

HAND QJG. OUT FOR BE1.I ENDS OF PIPE. **BARRa SHALL** BE LAID ON A FIRM BED OF ROVED MATERIAL

..!:U\P. 'A!:!VED

SI.RFACE RES ;



P Pf£pgQQNt?§Qf;J)IIIJ;

DRY CONDIIIONs . .

e•- ¾•CRUSHED ROCK

WET CONDITIONS AND BAY MUD CONDmONs

12•- 3'• CRUSHED ROCK

NOTES:

1.. COMPACT AU. CRUSHED ROCK ro701 **REI.AM 08Q1Y PER D 204.9**

2.. WHERE **A ROAD** GRIND IS SPECIFIED IHE TOTAL AC TI-UCKNESS OVER TiiE IRENCH SHALL BE 4•

3. 1DCAI.. JURISDIctION FOR JSPH6.LT CUITING REQUIREMENI'S.

HARDSON BAY SANITARY DISTRICT
500 TIBURON BOULEVARD
TIBURON, CA 94920
arin County, California

TYPICAL TRENCH SECTION

2005 SD-4.1