

**United States Environmental Protection Agency
Pacific Southwest Region (Region 9)**



**Clean Water Act Compliance Evaluation Inspection
Tamalpais Community Services District Wastewater Collection System
(Satellite Collection System to Sewerage Agency of Southern Marin
WWTP NPDES No. CA 0037711 and to Sausalito-Marín City Sanitary
District WWTP NPDES No. CA 0038067)**

Date of Inspection: August 8, 2007

Inspection team: Rick Sakow, EPA
Max Kuker, PG Environmental

Facility representatives: Robert Bunce

Report prepared by: Max Kuker, PG Environmental

Date prepared: February 11, 2008

Background

On 8/7/2007, USEPA Region 9 and its contractor inspected the Tamalpais Community Services District's (the "District") sanitary sewer system located in the unincorporated county area of Tamalpais Valley, located in southern Marin County, CA (between Mill Valley and Marin City). Spills and sanitary sewer overflows (SSOs) from the sewer system are prohibited by the Clean Water Act. Additionally, spills and SSOs from the District's system are prohibited by Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, WQO No. 2006-0003. The District is an enrollee under the Statewide General Waste Discharge Requirements. Additionally, the Agency is required to comply with the San Francisco Bay Regional Water Quality Control Board's July 2005 Section 13267 of the California Water Code letter that establishes earlier deadlines for submittal of Sewer System Management Plan (SSMP) components than the SSMP deadlines present in WQO No. 2006-003. As such, the Agency must comply with both the Section 13267 letter and WQO No. 2006-003 requirements.

The primary purpose of the inspection was to document the history of sewage spills, determine the adequacy of the District's spill response and prevention programs, evaluate sewer maintenance activities, and assess the accuracy and reliability of its spill reporting procedures. The primary on-site facility representative was Mr. Bob Bunce. Mr. Max Kuker from PG Environmental, LLC led the inspection accompanied by Rick Sakow from USEPA Region 9. The inspection included an interview held within the District's office and a tour of a pump station (Bell Lane Pump Station) located in the District's Municipal Yard. The weather at the time of inspection was sunny.

The District provides sewer, garbage, and parks services to citizens of the unincorporated county areas in Tamalpais Valley. The District's service area encompasses the Tamalpais Valley of Southern Marin County. The District's sewer service area is divided into eight zones based on the configuration of the sewer system. The District has an estimated population of approximately 6,000, with approximately 2,500 households and a small complement of commercial sites. The District is close to full build-out and expects approximately 5-10 new connections per year. According to the District's Sewer System Management Plan (Phase I), the District has approximately 812 maintenance access structures (582 manholes and 230 rodholes).

The District owns and operates approximately 27 miles of gravity sewer pipes, less than one mile of force main, and two pump stations. Two additional pump stations were under construction at the time of the inspection. Approximately 38% of the sewer in the District is located in private easements which has created difficulty in maintaining a large portion of their system, according to District staff. A large percentage of the District sewers are made of clay and were installed in the 1950s and 1960s.

At the time of the inspection, sewage from the entire District, except Kay Park, was pumped south to the Sausalito-Marín County Sanitary District (SMCSD) for treatment and disposal. Discharges from the SMCSD wastewater treatment plant into Richardson

Bay are regulated under NPDES permit No. CA0038067. Sewage from Kay Park, a small subdivision, was pumped north to the Sewerage Agency of Southern Marin (SASM) wastewater treatment plant. Discharges from the SASM wastewater treatment plant into Raccoon Strait (Central San Francisco Bay) are regulated under NPDES permit No. CA0037711.

According to Mr. Bunce, the District is making efforts to inventory their system, investigate possible areas of Inflow and Infiltration (I&I), and identify additional "hot spots." The District entered into a contract with E2, approximately six months prior to the inspection, to close caption circuit televise all 27 miles of their gravity sewer system. The televising is currently in progress, but a completion date was not provided. According to Mr. Bunce the District has also smoke tested many areas of their sewer system twice within the last 29 years.

Mr. Bunce stated that the average dry weather flow was approximately 300,000 gallons per day (gpd) and their average peak wet weather flow was approximately 800,000 gpd, indicating a peaking factor of approximately 2.5 to 3. The District stated that their estimated peak wet weather flow was approximately 1.9 million gallons per day on December 31, 2005 during an extreme wet weather event. The District is billed by the SASM wastewater treatment plant based on the number of connections rather than flow which provides no incentive to reduce I&I. Mr. Bunce stated that the District is currently incorporating a significant I&I review into the sewer televising project.

The District currently and historically has had an un-written agreement with Roto-Rooter for off-hour SSO response. This agreement is for 'on-call' sewer maintenance, blockage, and spill response after hours, on weekends and on holidays. According to Mr. Bunce, approximately 40 percent of all calls to his office to report an overflow or blockage are directed to call Roto-Rooter who investigates and corrects the problem. Roto-Rooter then provides documentation to Mr. Bunce regarding the volume of the spill, the cause of the spill, and the corrective actions taken to mitigate the spill, along with an invoice for its services.

Under section 301(a) of the Clean Water Act (CWA), it is unlawful for any person to discharge any pollutant from a point source into "waters of the United States" except in compliance with a NPDES permit. The Tamalpais Community Services District does not have an NPDES permit that authorizes the discharge of sewage spills. Therefore, any sewage spill from the District's collection system that flows to "waters of the United States" constitutes a violation of the Clean Water Act.

Attached to this inspection report are the following documents:

- Attachment 1 – Tamalpais Community Services District's Annual Budget for Fiscal Years 2005/2006 and 2006/2007;
- Attachment 2 – Tamalpais Community Services District's SSO Tracking Sheet;

- Attachment 3 – Tamalpais Community Services District’s Sanitary Sewer Overflow Report; and
- Attachment 4 – Roto Rooter After-Hours, Weekend, Holiday Response Checklist.

Findings

1. **Occurrence of spills.** Discharges to waters of the United States without a permit are prohibited under Section 301(a) of the Clean Water Act. Additionally, as per Part C.1 Prohibitions of the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, WQO No. 2006-0003, any spill that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited. The District reported seven sewage spills in calendar year 2005, eight sewage spills in calendar year 2006, and eight spills through May 1, 2007 from its collection system to the California Regional Water Quality Control Board. According to the reports, six of seven of the spills in the 2005 reporting period were a result of blockages due to roots, all but one of the eight spills in 2006 were caused by blockages in the system from multiple sources including roots, grease, and multiple unidentified sources, and five of the eight spills reported for the selected period of 2007 were caused by blockages due to roots. Combined, the reported spills total approximately 10,950 gallons with approximately 9,175 gallons reaching waters of the State. All spills listed in this report were reported to the San Francisco Bay Regional Water Quality Control Board via the Regional Water Board’s SSO website and within the District’s Annual Report. Based on 28 miles of sewers in the Tamalpais Community Services District, the spill rate was 25 spills/100 miles/yr in 2005 and was 28.5 spills/100 miles/yr in 2006. A listing of the reported spills is provided in Table 1 below.

Since May 2007, the District has been required to report all sewage spills to the State Water Resources Control Board via the California Integrated Water Quality System (CIWQS) website. The spills reported to the CIWQS system were not included in this report.

Table 1. Reported Spills from January 1, 2005 through April 30, 2007 from the District's Collection System

Incident Date	SSO Estimated Volume (gal)	SSO Estimated Volume Recovered	SSO Destination	Cause of SSO	
4/26/2007	50	0	BUILDING/STRUCTURE	BLOCKAGE	ROOTS
4/24/2007	50	0	YARD/LAND	BLOCKAGE	ROOTS
4/20/2007	120	0	YARD/LAND	BLOCKAGE	ROOTS
3/23/2007	100	0	STREET/CURB & GUTTER	BLOCKAGE	ROOTS
2/18/2007	100	0	STREET/CURB & GUTTER	BLOCKAGE	ROOTS
2/15/2007	30	0	YARD/LAND	BLOCKAGE	GREASE
2/6/2007	3,300	0	SURFACE WATER IMPACT	INFRASTRUCTURE FAILURE	N/A
2/6/2007	1,600	0	SURFACE WATER IMPACT	INFRASTRUCTURE FAILURE	N/A
12/2/2006	40	0	GROUND WATER IMPACTED	BLOCKAGE	MULTIPLE CAUSES
11/20/2006	0	0	NO WATER INVOLVED	BLOCKAGE	GREASE
8/19/2006	450	0	STORM DRAIN	BLOCKAGE	MULTIPLE CAUSES
8/14/2006	100	0	STORM DRAIN	ELECTRICAL POWER FAILURE	GREASE
8/13/2006	30	0	YARD/LAND	BLOCKAGE	DEBRIS FROM LATERALS
2/22/2006	600	0	STREET/CURB & GUTTER	BLOCKAGE	ROOTS
1/23/2006	200	0	YARD/LAND	BLOCKAGE	ROOTS
1/17/2006	100	0	STREET/CURB & GUTTER	BLOCKAGE	ROOTS
12/2/2005	25	0	STORM DRAIN	BLOCKAGE	ROOTS
12/2/2005	0	0	NO WATER INVOLVED	BLOCKAGE	ROOTS
12/2/2005	200	0	YARD/LAND	BLOCKAGE	ROOTS
12/2/2005	100	0	STORM DRAIN	BLOCKAGE	ROOTS
11/22/2005	3600	1500	SURFACE WATER IMPACT	INFRASTRUCTURE FAILURE	N/A
10/12/2005	30	0	STREET/CURB & GUTTER	BLOCKAGE	ROOTS
9/4/2005	100	0	YARD/LAND	BLOCKAGE	ROOTS

- 2. Failure to maintain adequate records for reported and unreported spills.** As per Part B.5 of the Monitoring and Reporting Program (MRP) No. 2006-0003-DWQ, the District is required to maintain records of all SSOs. At the time of the inspection, the District representatives provided a tracking sheet (see Attachment 2) of the spills responded to by the District staff and a separate response log that is prepared by Roto-Rooter for spills responded to by Roto-Rooter staff. The tracking sheet used by the District staff contains only the following information: address, Water Board tracking number, and date of the spill. Mr. Bunce stated that no other forms or field reports are used to document any additional details of the spill, including the start and end times of the spill, cause of the spill, estimated

volume of the spills, etc. Therefore, very little documentation was available to confirm the accuracy of the information submitted to the Regional Water Board regarding spills. The District contracted a vendor to assist them in the development of a Sanitary Sewer Overflow Report form (see Attachment 3) to be used in the field that appears to meet the requirements of the MRP, but the District had not implemented the use of the form at the time of the inspection. The documentation provided to the District by Roto-Rooter (see Attachment 4) does appear to provide adequate field documentation regarding its spill response although it is encouraged that Roto-Rooter implement the use of the District's new Sanitary Sewer Overflow Report form to provide additional information that will assist the District during evaluations of their maintenance and response programs.

- 3. Failure to contain and mitigate the impacts of an SSO.** As per Part D.3 of the State Water Resources Control Board Order No. 2006-0003-DWQ, in the event of a spill, the enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO. The District relies on a verbal agreement with Roto-Router to respond to spills and correct problems which may have caused the spill. Mr. Bunce stated that Roto-Router responds to overflows that occur on weekends, after hours, and holidays and account for approximately 40% of the overflows in the District overflows. The average distance between the District and Roto-Router in Novato is approximately 20 miles; therefore, it is unlikely that a response time would be less than 30 minutes. Other factors could lengthen the time considerably, e.g., traffic on US 101. According to Mr. Bunce, the response times varies but typically ranges between 30 minutes and 1-hour. During the period from January 1, 2005 through April 30, 2007, the District reported 23 spills totaling approximately 10,950 gallons. The District was only able to recover approximately 1,500 gallons, accounting for 13.7 percent of the total volume.

There is no written or verbal agreement between the District and Roto-Router regarding the maximum response time for SSOs. In addition, the District is limited to tasking Roto-Router with small jobs (under \$15,000 for any one project) without procuring the work through a contract with a bid and proposal process. This limitation could possibly prevent the Roto-Router from properly responding in the event of a catastrophic spill.

Summary

The information gathered during the inspection indicates a lack of adequate documentation of maintenance and spill records, reporting, and tracking. The lack of this documentation appears to stem from a failure to implement a mechanism to clearly track the operation and maintenance of the sewer system, spills and associated activities, and planning for future maintenance activities. These mechanisms are essential for enabling the District to evaluate its activities to decrease the number or eliminate spills completely from its sewer system. Tracking spills and maintenance is important to identify areas

where increased maintenance may be necessary. For example, the District identified root intrusion as primary cause of spills; tracking root intrusion “hot spots” as well as tracking maintenance activities related to these hot spots will assist the District in preventing future spills. The District does not perform proactive routine maintenance of their overall system. The District has a hand-written “Tamalpais Community Services District Sewer Maintenance Schedule” identifying “hot spots” dated 2000; District personnel stated that this has been updated.

The District is encouraged to augment their current spill data acquisition and tracking to collect information such as the source and mechanism of initial identification of a spill (e.g., resident via government pages listing for Sanitary District) and response time. The District collected some relevant information on a tracking form that was completed by personnel in the office, but the form does not contain enough information to document the specific events of a spill. Better tracking and evaluation of the information would allow for future performance tracking and reporting.

ATTACHMENT 1

Tamalpais Community Services District's Annual Budget for Fiscal Year's
2005/2006 and 2006/2007

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Accrual Basis

Tamalpais Community Services District Transaction Detail By Account July 2005 through June 2006

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Type	Date	Num	Name	Memo	Amount
6000 - Active Capital Projects					
5603 - 2005-06 Sewer Impv General					
Bill	3/17/2006	CA-N...	E2 Consulting Engineers, ...	Flow Monitoring for Sewer Improvement Proje...	7,900.77
Bill	3/17/2006	CA-N...	E2 Consulting Engineers, ...	Flow Monitoring for Sewer Improvement Proje...	665.00
General Journal	3/31/2006	Fid33...		3	-8,565.77
Bill	4/26/2006	6272	Nute Engineering	Flow Meters--Engineering 3/1/06 - 3/31/06	612.50
Bill	5/15/2006	6348	Nute Engineering	TV assistance Engineering 4/1/06 - 4/30/06	950.00
Bill	5/15/2006	CA-N...	E2 Consulting Engineers, ...	Flow Monitoring for Sewer Improvement Proje...	3,737.47
Bill	5/30/2006	HT06...	E2 Consulting Engineers, ...	Flow Monitoring for Sewer Improvement Proje...	1,940.00
General Journal	6/30/2006			10 to capitalize assets	-6,839.97
Total 5603 - 2005-06 Sewer Impv General					0.00
5320 - B.L.Pump House (Cap) Slide Gate					
Bill	8/31/2005		Nute Engineering	Slide Gate at Bell Lane	513.25
Bill	9/30/2005		Nute Engineering	Slide Gate at Bell Lane	667.50
General Journal	9/30/2005			13	-1,180.75
Bill	11/30/2005		Nute Engineering	Slide Gate 9/1 - 9/30	601.50
General Journal	12/31/2005	AJE's		6 To capitalize large projects	-601.50
Bill	1/3/2006	7190	Nute Engineering	Engineering 11/01 > 11/30	142.00
Bill	1/24/2006	7190...	Nute Engineering	Engineering 12/01 > 12/31/05	213.00
Check	2/23/2006	8721	Linscott Engineering Contr...	Slide Gate Construction--100%	19,051.25
General Journal	3/31/2006	Fid33...		3	-19,406.25
Total 5320 - B.L.Pump House (Cap) Slide Gate					0.00
5601 - Robin, Starling, Bell Mkt Sewers					
Bill	11/30/2005		Nute Engineering	Engineering 9/1 - 9/30/05 #1	2,755.00
Bill	11/30/2005		Nute Engineering	Engineering 9/1 - 9/30/05 #2	568.00
Bill	12/12/2005		Nute Engineering	Sched A Design 10/1 - 10/31/05	5,988.00
Bill	12/12/2005		Nute Engineering	Sched A Design 10/1 - 10/31/05	2,957.00
General Journal	12/31/2005	AJE's		6 To capitalize large projects	-12,268.00
Bill	1/3/2006	7336...	Nute Engineering	Engineering 11/01 > 11/30	1,688.25
Bill	1/24/2006	7336...	Nute Engineering	Engineering 12/01 > 12/31/05	4,121.75
Bill	2/17/2006	6081	Nute Engineering	Engineering 1/1/06 > 1/31/06	8,150.00
Bill	3/17/2006	6187	Nute Engineering	2/01/06 > 2/28/06 Engineering	14,018.50
General Journal	3/31/2006	Fid33...		3	-27,978.50
Bill	4/4/2006	905-05	Miller Pacific Engineering ...	Geotechnical services, permits, 3 borings, test...	5,000.00
Bill	4/26/2006	6265	Nute Engineering	Engineering 3/1/06 - 3/31/06	13,497.50
Bill	4/26/2006	6275	Nute Engineering	net of fees collected from contractors	598.14
Bill	5/15/2006	6347	Nute Engineering	Engineering 4/1/06 - 4/30/06	3,740.00
Bill	5/15/2006	6352	Nute Engineering	Engineering 4/1/06 - 4/30/06	6,163.50
Bill	5/30/2006	3013...	Water Components & Buil...	4 - 4" Wye gasket	614.78
Bill	5/30/2006	3013...	Water Components & Buil...	Sewer Parts	52.26
Credit	6/8/2006	3013...	Water Components & Buil...	Return Tapping Saddle	-554.62
Bill	6/14/2006	3013...	Water Components & Buil...	4 - 4" Wye gaskets +	720.76
Bill	6/14/2006	3013...	Water Components & Buil...	1 - Tapping Saddle 8"	643.62
Bill	6/14/2006	3013...	Water Components & Buil...	2 Caulder 4" bush, +	18.56
Check	6/23/2006	9254	Maggiola & Ghilotti Inc.	Construction Progress Payment #1	357,146.50
Bill	6/28/2006	6426	Nute Engineering	Const Staking, Submittals, Observation May 06	10,688.50
General Journal	6/30/2006	HT06...		10 to capitalize assets	-398,329.50

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Accrual Basis

Tamalpais Community Services District Transaction Detail By Account July 2005 through June 2006

Type	Date	Num	Name	Memo	Amount
Total 5601 - Robin, Starling, Bell Mkt Sewers					
5602 - Cardinal & Flamingo Sewers (C)					
Bill	1/3/2006	7339...	Nute Engineering	Engineering 11/01 > 11/30	0.00
Bill	1/24/2006	7339...	Nute Engineering	Sched A Design	8,244.00
General Journal	3/31/2006	Fid33...		3	6,078.00
					-14,322.00
Total 5602 - Cardinal & Flamingo Sewers (C)					
5590 - Flamingo Rd Lift Station #2 (C)					
Bill	11/30/2005		Nute Engineering	Engineering 9/1 - 9/30/05	607.00
Bill	12/12/2005		Nute Engineering	Sched A Design 10/1 > 10/31/05	3,984.00
Bill	12/12/2005		Nute Engineering	Sched B Easements 10/1 - 10/31/05	213.00
General Journal	12/31/2005	AJE's		6 To capitalize large projects	-4,804.00
Bill	1/3/2006	7737...	Nute Engineering	Design 11/01 > 11/30	2,141.00
Bill	1/3/2006	7337...	Nute Engineering	11/01 > 11/30 Sch B, Easements/Property Acq	633.00
Bill	1/24/2006	7337...	Nute Engineering	Engineering 12/01 > 12/31/05	2,275.75
Bill	1/24/2006	7337...	Nute Engineering	Sched B Easements/Property Acq	457.00
Bill	1/24/2006	6106	Nute Engineering	Sched A Design	1,505.25
Bill	2/17/2006	6107	Nute Engineering	Sched B	1,092.00
Bill	3/17/2006	6188	Nute Engineering	2/01/06 > 2/28/06 Engineering	1,065.00
Bill	3/31/2006	Fid33...		3	-9,169.00
General Journal	4/26/2006	6267	Nute Engineering	Engineering 3/1/06 - 3/31/06	196.50
Bill	5/15/2006	6349	Nute Engineering	Engineering 4/1/06 - 4/30/06	150.00
General Journal	6/30/2006	HT06...		10 to capitalize assets	-346.50
					0.00
Total 5590 - Flamingo Rd Lift Station #2 (C)					
5595 - Pump Station Tenn Valley Rd (C)					
Bill	11/30/2005		Nute Engineering	Engineering 9/1 - 9/30/05	1,331.00
Bill	12/12/2005		Nute Engineering	Sched B Easements 10/1 - 10/31/05	284.00
Bill	12/12/2005		Nute Engineering	Sched A Design 10/1 - 10/31/05	2,762.00
General Journal	12/31/2005	AJE's		6 To capitalize large projects	-4,377.00
Bill	1/3/2006	7338...	Nute Engineering	Design 11/01 > 11/30	3,598.50
Bill	1/3/2006	7338...	Nute Engineering	11/01 > 11/30 Easements/Property Acq	1,804.00
Bill	1/24/2006	7338...	Nute Engineering	Sched A - Design	3,488.50
Bill	1/24/2006	7338...	Nute Engineering	Sched B	355.00
Bill	2/17/2006	6116	Nute Engineering	Sched A Design	2,323.50
Bill	3/17/2006	6189	Nute Engineering	2/01/06 > 2/28/06 Engineering	3,018.75
General Journal	3/31/2006	Fid33...		3	-14,588.25
Bill	4/26/2006	6268	Nute Engineering	Engineering 3/1/06 - 3/31/06	1,518.00
Bill	6/28/2006	6424	Nute Engineering	Engineering 5/1/06 - 5/31/06	3,606.00
General Journal	6/30/2006	HT06...		10 to capitalize assets	-5,124.00
					0.00
Total 5595 - Pump Station Tenn Valley Rd (C)					
5141 - Sewer Rate Increase 2005/06					
Bill	7/19/2005	June6...	Rauch Communication Co...	Sewer rate increase	6,057.60
Bill	7/31/2005	Jul-70...	Rauch Communication Co...	Sewer rate increase	788.63
Bill	8/31/2005		Hilton Farnkopf & Hobson...	Financial Planning for Sanitation 7/1 - 7/31/05	4,143.85
Bill	8/31/2005		Rauch Communication Co...	Sewer rate increase/thru 7/31/05	5,412.13
Bill	11/30/2005		Meyers Nave	Loan Documentation 11/4-11/9	1,574.87

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Tamalpais Community Services District
 Transaction Detail By Account
 July 2005 through June 2006

Type	Date	Num	Name	Memo	Amount
Bill	12/12/2005		Marin County Tax Collector	Attorney fees April > June 05	1,406.25
Bill	1/3/2006	292B	Bartle Wells Associates	Financing services for \$3 mill loan	13,400.00
Check	5/15/2006	9112	Marin County Treasurer-T...	Byron Toma 7/1/05 > 9/30/05	312.50
General Journal	6/30/2006	HT06...		10 to capitalize assets	-33,603.62
Total 5141 - Sewer Rate Increase 2005/06					-507.79
Total 6000 - Active Capital Projects					-507.79
TOTAL					-507.79

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**Tamalpais Community Services District
Transaction Detail By Account
July 2006 through June 2007**

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Type	Date	Num	Name	Memo	Amount
6000 - Active Capital Projects					
5610 - 2006-07 Sewer Impr General					
General Journal	9/19/2006	1920	E2 Consulting Engineers, ...	July 1 - 28, 2006	6,640.00
General Journal	10/23/2006	1922	Nute Engineering	#6640, 6712	337.50
General Journal	10/23/2006	1923	E2 Consulting Engineers, ...	July 1 - 28, 2006	41,020.00
Bill	1/24/2007		Meyers Nave	12/31/06 Sewer Laterals Atty Fees	296.64
General Journal	1/29/2007	Fid 2...	E2 Consulting Engineers, ...	#3 Fidelity #2078	14,767.50
General Journal	1/29/2007	Fid 2...	E2 Consulting Engineers, ...	#4 Fidelity #2078	3,547.50
General Journal	1/29/2007	Fid 2...	E2 Consulting Engineers, ...	#5 Fidelity #2078	3,080.00
General Journal	3/21/2007	Fid 2...	Nute Engineering	#6486, 6871, 7062	1,035.00
General Journal	4/20/2007	2171	E2 Consulting Engineers, ...	6 Nov 25 - Jan 31 07, incl Subtronic Corp	21,869.44
General Journal	5/21/2007	2190c	Nute Engineering	Assist TV 2/01/07 - 2/28	102.00
General Journal	6/4/2007	2208a	Nute Engineering	Nute 7261 TV 3/1 - 3/31	362.00
General Journal	6/30/2007	Nute...	Nute Engineering	Nute 7323	326.00
General Journal	6/30/2007	E2 1	E2 Consulting Engineers, ...	#7395 Assist E2 5/1 - 5/30	51.00
General Journal	6/30/2007	E2 2	E2 Consulting Engineers, ...	Collection System Evaluation Jan 27 - May 25...	15,053.32
General Journal	6/30/2007	Nute...	Nute Engineering	Collection System Evaluation May 26 - June 2...	4,180.00
				#7455 Assist E2 TV Inspection June 07	153.00
Total 5610 - 2006-07 Sewer Impr General					112,820.90
5601 - Robin, Starling, Bell Mkt Sewers					
Bill	7/26/2006	3013...	Water Components & Buil...	4" Pipe and fittings	73.21
General Journal	7/27/2006	MF D...	Maggiola & Ghiotti Inc.	Draw #4, MG Progress Pmt #2	352,095.96
General Journal	7/27/2006	MF D...	Nute Engineering	#6504 June 06 Engineering	6,654.25
Bill	7/31/2006	392525	Mill Valley Lumber Compa...	307 Starling repair	114.11
General Journal	9/19/2006	1916	Maggiola & Ghiotti Inc.	Progress Pmt	57,901.27
General Journal	9/19/2006	1917	Nute Engineering	#6520, 6521, 6524, 6425	17,660.75
General Journal	9/19/2006	1918	Miller Pacific Engineering ...	Soils Engineering	12,950.50
General Journal	9/19/2006	1919	Water Components & Buil...	30139523 4" pipe	73.21
Check	9/19/2006	100	Postal Annex	Notary services	20.00
Check	9/20/2006	9611	Marin County Recorder	VOID: Recording Fee for Sewer Completion	0.00
General Journal	10/23/2006	1921	Maggiola & Ghiotti Inc.	Progress Pmt	45,018.88
General Journal	10/23/2006	1922	Nute Engineering	#6639, 6711	5,851.00
General Journal	1/29/2007	Fid 2...	Nute Engineering	#6785, 6863, 7061	730.25
General Journal	3/21/2007	Fid 2...	Nute Engineering	7128 Jan 07	194.00
General Journal	3/21/2007	Fid 2...	Nute Engineering	7126 Jan 07 Sched A	798.97
General Journal	4/20/2007	2171	Nute Engineering	Prepare As Built Drawings 2/01 - 2/28	1,164.00
General Journal	4/20/2007	2171	Nute Engineering	Sched A 2/01/07 - 2/28	6,104.25
Total 5601 - Robin, Starling, Bell Mkt Sewers					507,404.61
5602 - Cardinal & Flamingo Sewers (C)					
General Journal	7/27/2006	MF D...	Nute Engineering	#6501 June 06 Engineering	184.00
General Journal	10/23/2006	1922	Nute Engineering	#6637	1,506.00
General Journal	1/29/2007	Fid 2...	Nute Engineering	#6781, 6868	16,537.21
Bill	4/4/2007	M47702	Rotorooter Sewer Service	Cardinal Court, TV 36 Laterals @ \$205, Clean...	7,805.00
General Journal	6/4/2007	2208d	Nute Engineering	Nute 7322	485.00
Bill	6/30/2007	7796	Marin Independent Journal	6/10 + 6/17 Notice Inviting Bids for 07 Sewer ...	162.34
General Journal	6/30/2007	Nute...	Nute Engineering	#7393 Engineering 5/1 - 5/30	15,957.00
Total 5602 - Cardinal & Flamingo Sewers (C)					42,636.55

Tamalpais Community Services District Transaction Detail By Account July 2006 through June 2007

Type	Date	Num	Name	Memo	Amount
5590 - Flamingo Rd Lift Station #2 (C)					
Check	7/14/2006	9339	Chevron U.S.A.	Lease Property for Pump Station on Flamingo ...	0.00
General Journal	7/27/2006	MF D...	Nute Engineering	#6499 June 06 Engineering	1,998.94
General Journal	10/23/2006	1922	Nute Engineering	#6634, 6707	3,520.85
General Journal	1/29/2007	Fid 2...	Nute Engineering	#6777, 6778, 6864, 6865, 7056, 7057	20,443.46
General Journal	3/21/2007	Fid 2...	Nute Engineering	7122 Jan 07 Sched A Incl DCV	5,693.44
General Journal	3/21/2007	Fid 2...	Nute Engineering	7123 Jan 07 Sched B	704.00
Check	4/6/2007	10329	Pacific Gas & Electric	VOID: Application for Service to Flamingo Roa...	0.00
Bill	4/12/2007	1089...	Marin Independent Journal	Notice Bids for Pump Stations 2/25/07	155.94
General Journal	4/20/2007	2171	Nute Engineering	Sched A 2/01/07 - 2/28	1,760.58
General Journal	4/20/2007	2171	Nute Engineering	Sched B 2/01/07 - 2/28	1,501.00
General Journal	5/21/2007	2190c	Nute Engineering	Nute 7259 3/1 - 3/31	4,369.34
General Journal	6/4/2007	2208b	Nute Engineering	Nute 7327	1,388.00
General Journal	6/30/2007	Nute...	Nute Engineering	#7199 Printing Plans & Specs	349.35
General Journal	6/30/2007	Nute...	Nute Engineering	#7397 Engineering May 1 - 30	4,407.95
General Journal	6/30/2007	Nute...	Nute Engineering	#7457 Engineering June 07	2,353.25
Total 5590 - Flamingo Rd Lift Station #2 (C)					48,646.10
5595 - Pump Station Tenn Valley Rd (C)					
General Journal	7/27/2006	MF D...	Nute Engineering	#6500 June 06 Engineering	2,503.44
General Journal	10/23/2006	1922	Nute Engineering	#6708	1,145.00
General Journal	1/29/2007	Fid 2...	Nute Engineering	#6779, 6780, 6866, 6867, 7058, 7059	15,660.52
Check	2/9/2007	10126	Pacific Gas & Electric	Service Application for Tenn Valley Rd Pump ...	2,000.00
General Journal	3/21/2007	Fid 2...	Nute Engineering	7124 Jan 07 Sched A Incl DCV	8,659.16
General Journal	3/21/2007	Fid 2...	Nute Engineering	7125 Jan 07 Sched B	790.00
Bill	4/12/2007	1089...	Marin Independent Journal	Notice Bids for Pump Stations 2/25/07	155.94
General Journal	4/20/2007	2171	Nute Engineering	Sched A 2/01/07 - 2/28	1,600.61
General Journal	5/21/2007	2190c	Nute Engineering	Nute 7260 3/1 - 3/31	3,365.99
General Journal	6/4/2007	2208c	Nute Engineering	Nute 7328	1,448.00
General Journal	6/30/2007	Nute...	Nute Engineering	#7398 Engineering May 1 - 30	3,982.64
General Journal	6/30/2007	Nute...	Nute Engineering	#7460 Engineering June 07	2,372.25
Total 5595 - Pump Station Tenn Valley Rd (C)					43,683.55
5607 - Jean-Linda-Ross Sewer Improv 07					
Bill	7/24/2006	6502	Nute Engineering	Linda Way, Ross Dr	26.25
General Journal	1/29/2007	Fid 2...	Nute Engineering	#6782	1,077.00
Bill	5/15/2007	7263	Nute Engineering	Engineering Services 3/1/07 - 3/31/07	5,888.75
Bill	6/30/2007	7796	Marin Independent Journal	#710 + 6/17 Notice Inviting Bids for 07 Sewer ...	162.34
General Journal	6/30/2007	Nute...	Nute Engineering	#7326 Engineering April 1 - 30	12,999.50
General Journal	6/30/2007	Nute...	Nute Engineering	#7396 Engineering May 1 - 30	37,004.50
General Journal	6/30/2007	Nute...	Nute Engineering	#7458 Engineering June 07	901.98
General Journal	6/30/2007	Nute...	Nute Engineering	#7459 Engineering June 07	11,275.00
Total 5607 - Jean-Linda-Ross Sewer Improv 07					69,335.32
Total 6000 - Active Capital Projects					824,527.03

FY06-07

824,527.03

TOTAL

ATTACHMENT 2

Tamalpais Community Services District's SSO Tracking Sheet

Tracking #s

MK 8/1/07

309 Carrera - # 2196 9/25/05 *
 W Calif & Shoreline 2198 10/16/05 *
 388 Carrera 2200 9/24/05 *
 Shoreline Hwy & Tenn Ave 2208 11/26/05 *
 296 morning Sun 2210 10/12/05 *
 1045 Erica Rd 2213 9/4/05
 203 MARVIN AVE 2191 11/22/05

 295 morning 1/17/06 2640
 315 Carrera 1/23/06 2682
 Chamberlain Ct 2/27/2006 2917
 360 Jean 3727 8/14/06
 301 Enterprise 3731 8/14/06
 335 Jean St 3777 8/23/06
 247 Shoreline 4143 11/20/06 Grease
 Shoreline Hwy 4735 2/6/07 hole
 Shoreline Hwy 4738
 410 maple st 4787 2/15/07 Grease Roots
 558 fairview 4789 2/18/07 Roots
 806 Smith Rd 4990 3/23/07 Roots

ATTACHMENT 3

Tamalpais Community Services District's Sanitary Sewer Overflow Report

Tamalpais Community Services District Sanitary Sewer Overflow Report

5H

* - Required Fields

This Report is (check one): Preliminary Final Revised Final

A. SSO OCCURRING TIME

Date SSO originally reported:* ___/___/___ SSO Date:* ___/___/___ SSO Time:* ___:___

SSO End Date:* ___/___/___ SSO End Time:* ___:___ SSO Duration:* (hour) _____

SSO Reported To: _____

SSO Reported By: _____ Phone: _____

Weather conditions prior 72hours: Sunny Weather Cloudy Weather Rainy Weather Rain for Several Days

B. SSO DESCRIPTION

SSO Source:* Manhole- Structure ID#: _____ Pipe Clean Out Pump station Other

- If Other, please specify: _____

Final spill destination: * Storm Drain Capture in Storm Drain Building Structure Yard/Land

Street/Curb & Gutter Surface Water Impact Ground Water Impact No Water Involved Unknown

Did incident reach State water?* Yes No

Any Fish Killed?* Yes No

Estimate volume spilled:* (in gallons) _____ Method Calculated: _____

Volume of SSO recovered/contained:* (gal) _____ Volume of SSO discharged to State water:* (gal) _____

Were photos taken? No Yes - How many?: _____

C. SSO LOCATION

Street address/Site:* _____

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

D. CAUSE OF SSO

Spill Cause: Blockage Infrastructure Failure Inflow Infiltration Electrical Power Failure

Flow Capacity Deficiency Natural Disaster Bypass Cause Unknown

- If spill caused by Blockage, please specify: Roots Grease Debris Debris from Laterals Vandalism

Animal carcass Construction Debris Multiple Causes

- If spill caused by Infrastructure Failure, please specify: Breakage of collection system

Damage to collection system Leaks to collection system Pump station failure Multiple causes

- Specify other cause: _____

E. INCIDENT RESPONSE

Visual inspection result of receiving water:* _____

Were response/corrective actions taken? * Yes No

Were clean-up actions taken? * Yes No

Were disinfections actions taken? * Yes No

Were samples collected? * Yes No

Any on-going investigation? * Yes No - If Yes, Please specify completion date: ___/___/___

- Status: Open Active Open Enforcement Closed

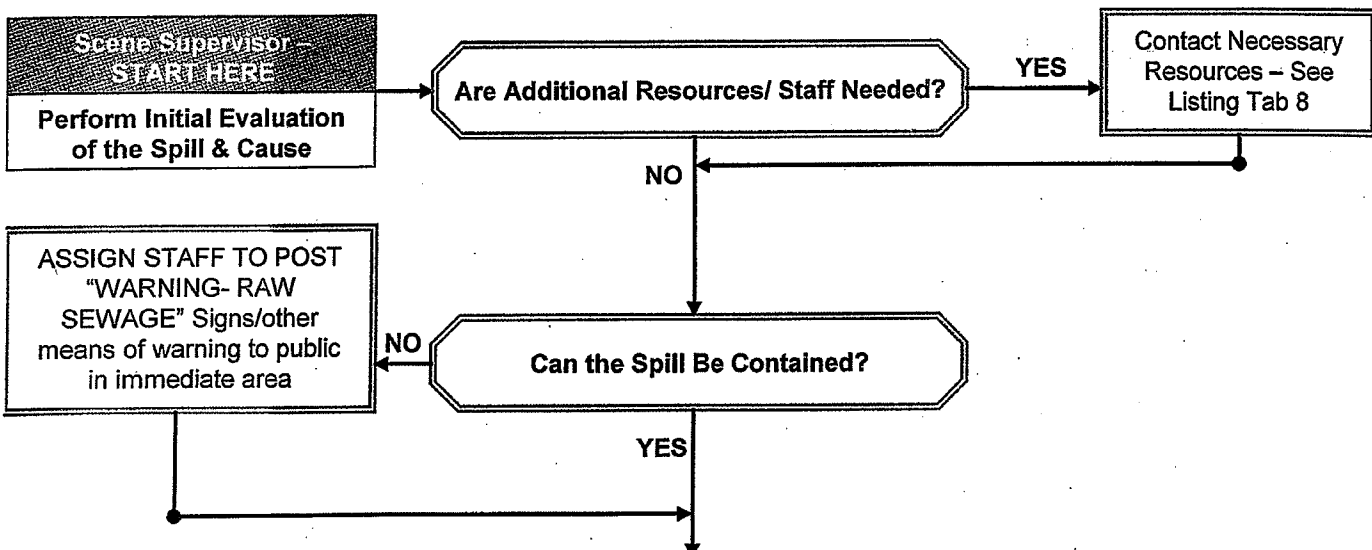
Were health warning posted? Yes No # Days warnings posted: _____ Any beach closure? * Yes No

Health warning/Beach closure posting/details: _____

of overflows w/in 1000ft of this location in last 12 months: _____ List dates: _____

MK 8/7/07

RESPONDING TO A SANITARY SEWER MAINLINE OVERFLOW **5A**



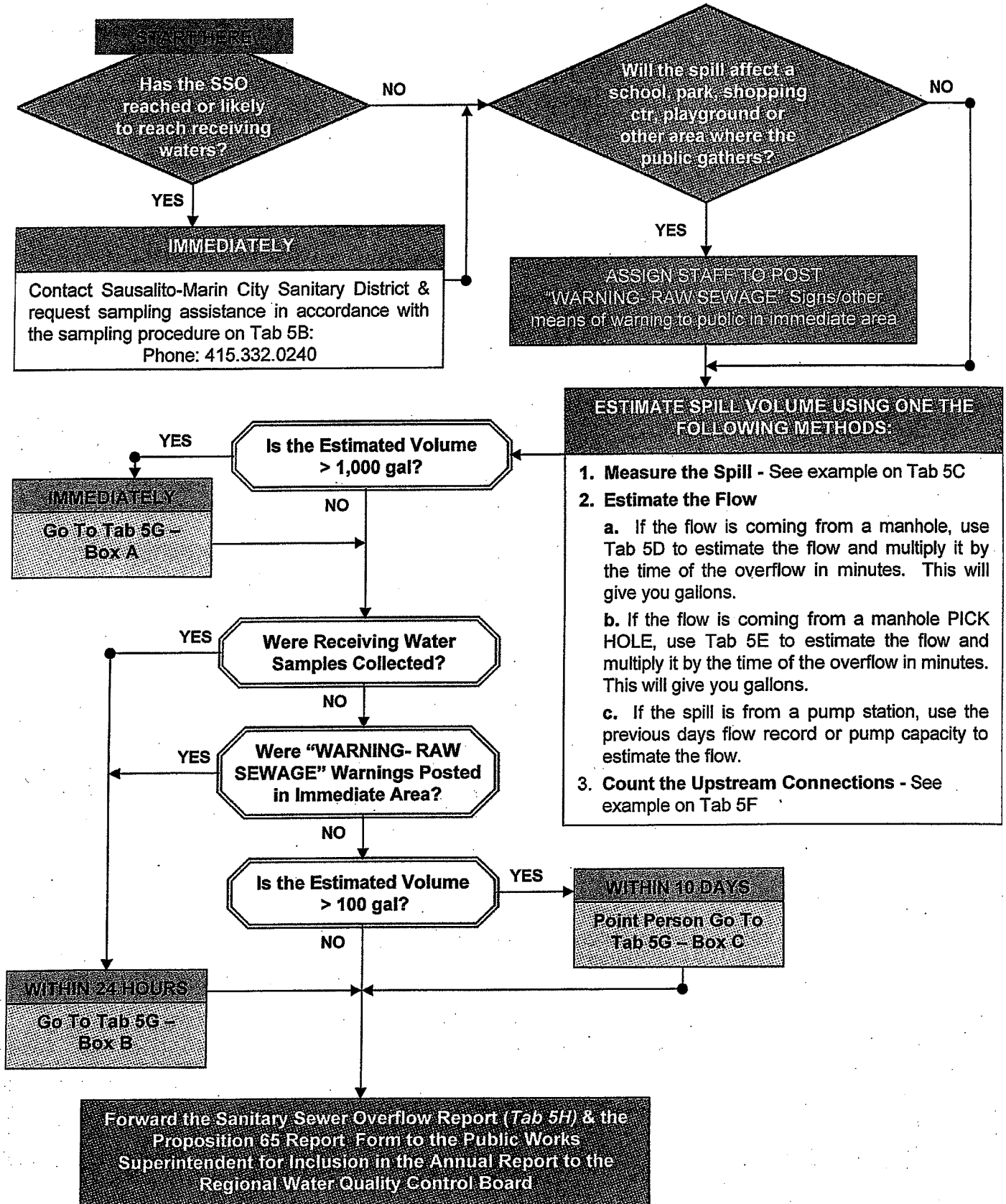
STEP	ACTIONS
1 st - Diversion & Containment	1. DIVERT AWAY FROM SENSITIVE AREAS a. UNPLUGGED STORM DRAINS, SCHOOLS, DAYCARES, PLAYGROUNDS, INTERSECTIONS, ETC. → Cover unplugged storm drains with mats or use dirt or other diking material to divert away from sensitive areas b. ENSURE PUBLIC CONTACT DOES NOT OCCUR. Use cones/barricades for lane closures until spill can be completely removed 2. CONTAIN SPILL & RETURN TO SYSTEM, IF POSSIBLE → Techniques: → Install air plugs in storm drain catch basins & divert flow to catch basin → Build berm to channel flow to downstream manhole (<i>barricade if you leave it open</i>) → Use bypass pumps to pump around blockage until it can be removed → Divert to low area of ground where it can be collected later
2 nd - Blockage Clearing	Use the appropriate cleaning equipment to the situation to hydroflush, rodder, or hand rod to clear a blockage. Make certain to either have the vactor setup at the downstream manhole or use a fork or trap at the outlet of the manhole in the channel to catch any debris that is released. If using the rodder, set-up at the first dry manhole and run upstream until you hit the blockage. Once you break through the blockage, pull the rods and cleaning tools out. If you leave the rods in the line it could restrict the flow. Once the flow is back to normal, run the line to the next manhole. <p style="text-align: center;">SEE TAB 6 FOR THE HYDROFLUSHING SOP</p>
3 rd - Area Cleanup	ASSIGN STAFF TO BEGIN CLEANUP 1. Remove all signs of gross pollution (toilet paper, solids, grease, etc.) 2. Flush area w/metered water – Unless raining (3 times the amount of the spill, if possible) a. Setup a berm or other means to contain all chlorinated flush water so that it can be delivered to the sewer or removed with the vactor b. DO NOT USE ANY DISINFECTANT THAT MAY ENTER THE STORM DRAIN OR OTHER WATER SUPPLY!
4 th - Document & Report	1. Photograph the spill location and the area affected 2. Complete the Sewage Overflow Report (Tab 5H) 3. Complete the Proposition 65 Report Form (Tab 5I) 4. Go To Side 2 and follow the instructions

RESPONDING TO A SANITARY SEWER MAINLINE OVERFLOW

5A -
side 2

Management Duties

Scene Supervisor Duties



ATTACHMENT 4

Roto Rooter After-hours, Weekend, Holiday Response Checklist

MK 8/17/07

TRACKING # 4179

Roto Rooter

After Hour / Weekend / Holiday Response Checklist

- 1) Stoppage Location: 335 S MORNINGSTAR DR
- 2) Arrival Time: 10:00 AM / PM
- 3) Notified District for Building Flooding: Yes / No
- 4) Notified District for Spills over 1000 gallons: Yes / No
Name: _____
- 5) Sewer cleared within 1 hour: Yes / No
(Less than 5 gallons per minute) Name: _____
- 6) Sewer cleared within 1 hour: Yes / No
(More than 5 gallons per minute)
- 7) Date & Time spill was detected: 12-2-06 9:50? AM / PM
Date Time
- 8) Method used to clear stoppage: MAINLIN MACHINE
- 9) Cause of stoppage: WIPE'S FEMALE PRODUCTS
- 10) Gallons per minute: 19L
- 11) Estimated total gallons spilled: 40 gal
- 12) Where did spill drain to: HILLSIDE
- 13) People who responded to the stoppage: KIRK
- 14) Is this a district problem? YES (If yes, charge 2hr minimum)
- 15) Is this a private lateral problem? _____ (If yes, charge 1hr minimum)

District Contacts

Your MINOR report has been submitted on Monday, December 04, 2006,10:11:43 AM
Your SSO Tracking Number: 4179 (Report ID : 16 Version : 1)
Please write down your SSO Tracking Number, SSO Report ID and Version number for future reference.

A confirmation email was sent to the Water Board Staff and these addresses:
bbunce@tcsd.us, jnelson@tcsd.us

[Return to Selection Menu](#) [Logout](#)

Automatic Notification Email Not Sent! Tried 2 times.
Please manually email to jlam@waterboards.ca.gov, mchee@waterboards.ca.gov

With Subject :
SSO Submission Confirmation - submitted by Tamalpais - Report Type: minor

With Body : SSO Track Num: 4179 (SSO ID : 16 Version : 1) Spill Cause: BLOCKAGE Amount Spilled in Gal : 40 Report Type : minor Spill Date: 12/2/2006 Submit Date and Time: 12/4/2006 10:11
Attachments: Click on this link or visit it via your browser to review this SSO report:
https://www.r2esmr.net/sso_lookupreport.asp?user=admin&track=4179