



THE TOWN OF  
CORTE MADERA  
MARIN COUNTY CALIFORNIA

# Sanitary District No. 2 of Marin County

OVERFLOW EMERGENCY

RESPONSE PLAN

HANDBOOK

Updated August 2013

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## DEFINITIONS

**SEWAGE OVERFLOW** – any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

**LATERAL SEWER**, also referred to as lateral, sewer lateral, side sewer or building sewer means a sewer connecting a building to a main sewer either directly or indirectly, per Section 21.04.010 of Title 21, Sanitary District No. 2 of Marin County. The lateral sewer includes the pipe 2 feet from the exterior building foundation to the main, including the connection fitting to the main.

**SD No. 2** – Sanitary District No. 2 of Marin County

**SSO** – Sanitary Sewer Overflow

## CUSTOMER RELATIONS

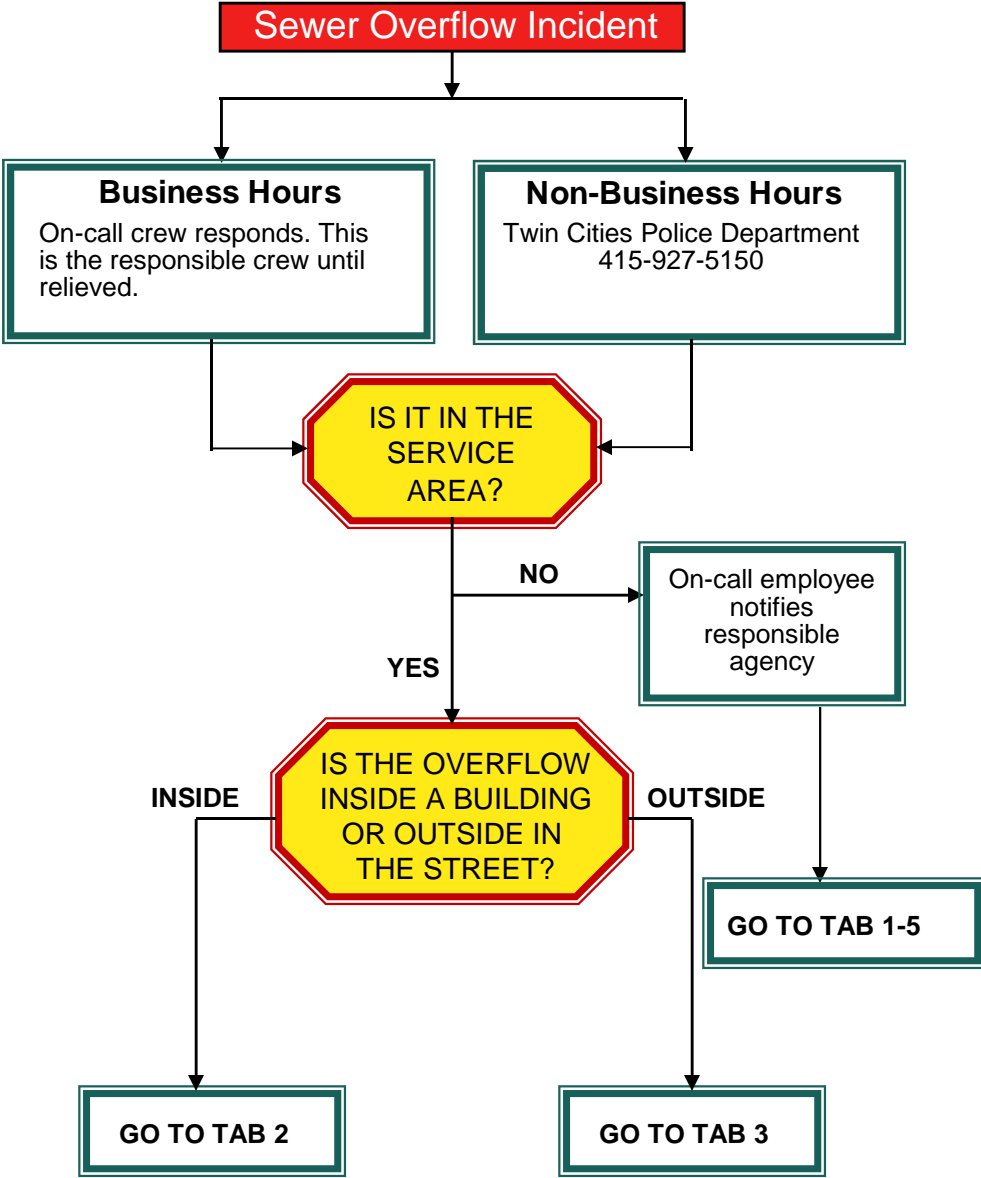
It is important for employees to communicate effectively with homeowners or residents within Sanitary District No. 2, especially in sewage backup situations. How we communicate - on the phone, in writing, or in person – is how we are perceived. Good communication with the homeowner results in greater confidence in our ability to address the problem satisfactorily, less chance of having the homeowner prolong the claims process, and less chance of him/her exaggerating the damage done to the property.

As a representative of the District, you will occasionally have to deal with an irate homeowner. A calm reasonable homeowner can become unreasonable and irate should he/she perceive us as being indifferent, uncaring, unresponsive, or incompetent. Although sometimes difficult, effective management of a sewage backup situation is critical. If it is not managed well, the situation can get out of hand and the District can end up with a costly prolonged battle. We want the homeowner to be assured that the District is responsive and the homeowner's best interest is a top priority.

**A FEW COMMUNICATION TIPS**

1. Give the homeowner ample time to explain the situation, listen attentively to the homeowner's concerns, and take notes.
2. As soon as possible, let the homeowner know that you will find the source of the problem and will have it corrected as quickly as you can.
3. Acknowledge the homeowner's concerns. For example, if the homeowner seems angry or worried about property damage, say something like, "I understand you're concerned about the possible damage to your property, but we will have a professional clean-up crew restore the area, and our insurance company will take care of any repairs or losses you may have as a result of this incident."
4. Express regret, on behalf of the District, for any inconveniences caused by the incident.
5. As much as possible, keep the homeowner informed on what is being done and will be done to correct the problem.
6. Keep focused on getting the job done in a very professional manner. Don't wander from the problem with too much unnecessary small talk.
7. Don't find fault or lay blame on anyone.
8. Make sure the homeowner has the name and telephone number of persons to contact at the District and our stand-by cell number 415-613-5437.
9. Make sure someone follows up with a telephone call to ensure everything is being handled as it should be.

**Initial Call** **1-3**



## Emergency Assistance Staff Call-Out List 1-4

Call stand-by duty assignee for assistance.

<u>Call No.</u>	<u>Employee</u>	<u>Home Phone No.</u>
722	[REDACTED]	[REDACTED]
726	[REDACTED]	[REDACTED]
735	[REDACTED]	[REDACTED]
713	[REDACTED]	[REDACTED]
727	[REDACTED]	[REDACTED]
728	[REDACTED]	[REDACTED]

If there is no response when calling these numbers, please call the following employees who will decide how to handle the matter.

Kevin Kramer  
Director of Field Maintenance and Operations  
[REDACTED]

Michael Palmer  
Asst. Superintendent of Public Works  
[REDACTED]

Barry Hogue  
Director of Public Works  
[REDACTED]

Phone Numbers for internal use only have been redacted.

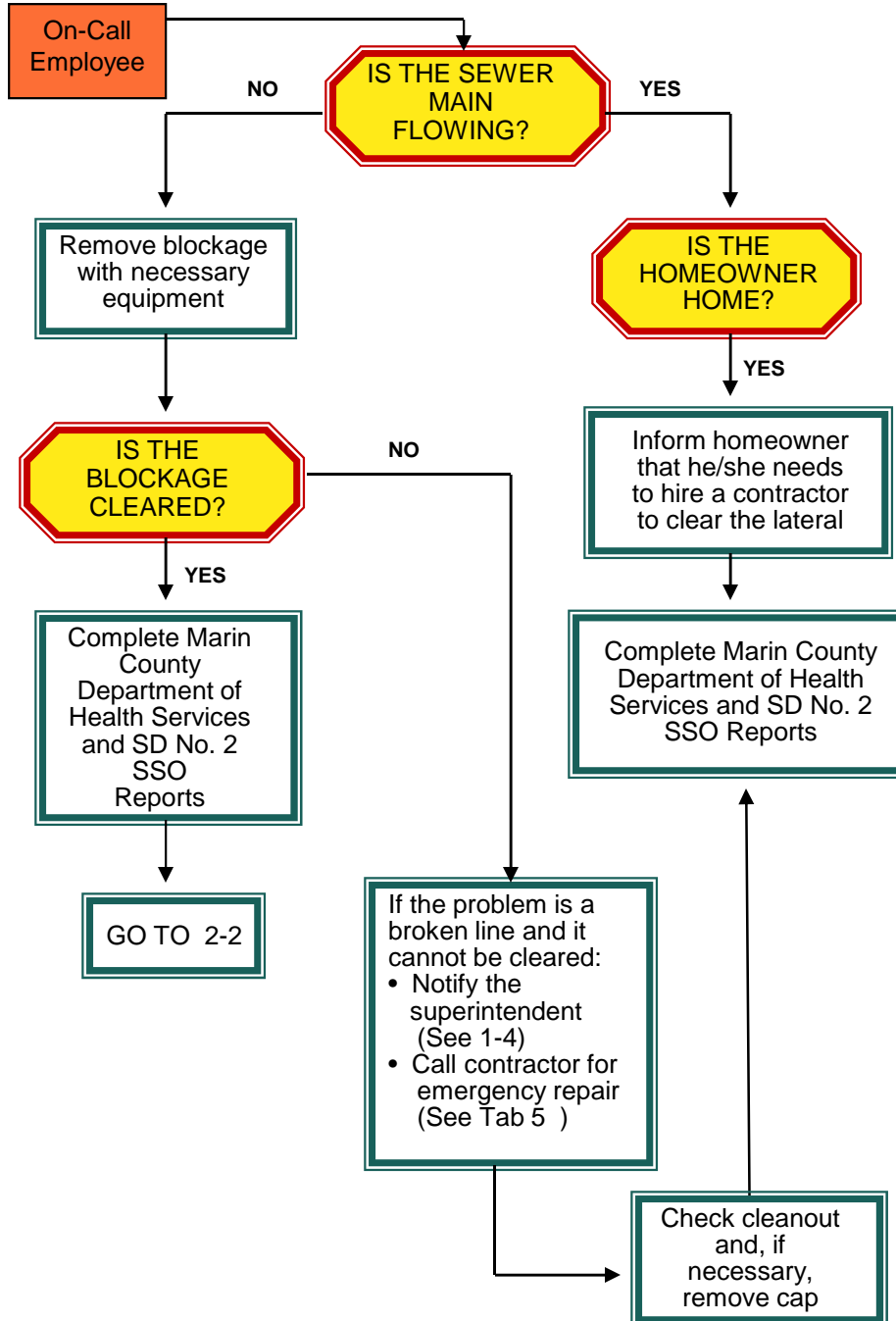
**Agencies to Contact within 2 Hours  
if SSO reaches a Drainage Channel  
or Surface Waters**

**1-5**

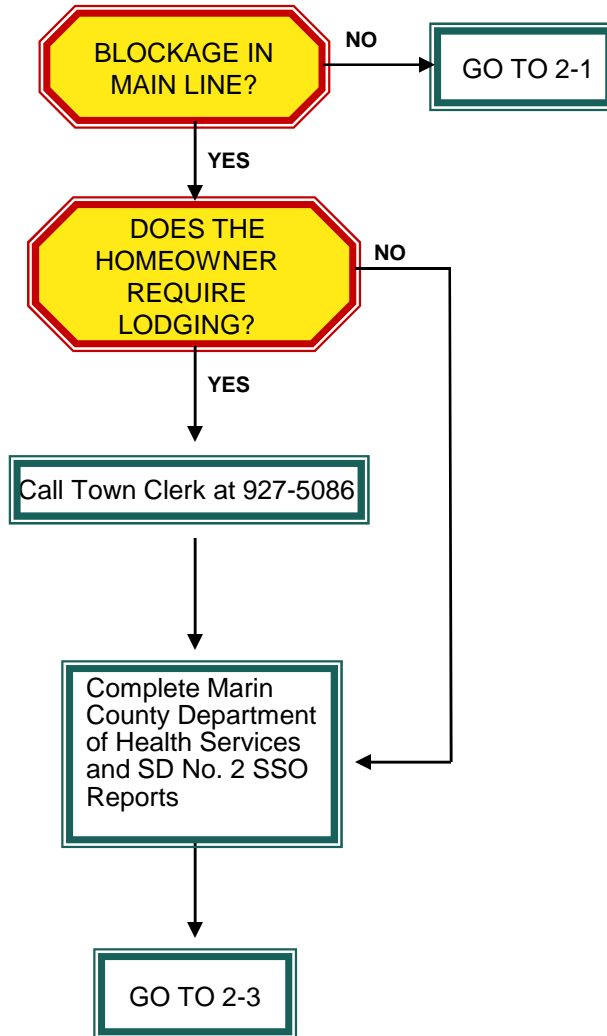
- Office of Emergency Services: 800-852-7550
  - Get and record a tracking number
  
- California Water Resources Control Board (RWQCB):
  - Via Internet at <http://ciwqs.waterboards.ca.gov/ciwqs/>
  
- Marin County Communications Center: 415-499-7237
  - Alternate line: 415-472-0911
  - Deputy Director of the Environmental Health Services Division
  - Public Health Officer

# Inside Initial Response

2-1







Whenever there is a possibility of property damage, have the homeowner contact the Town Clerk of the Town of Corte Madera for a copy of the District's claim form:

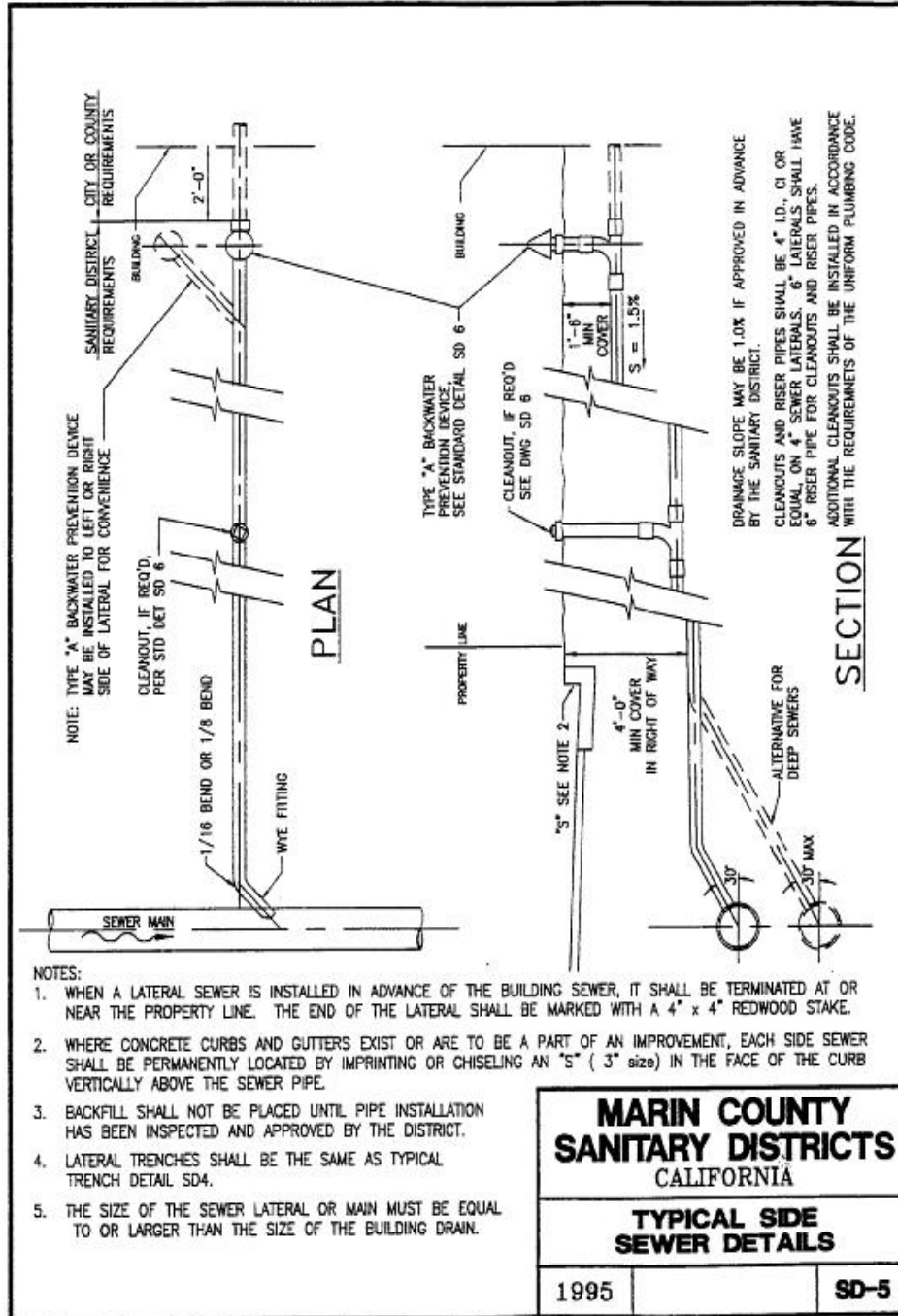
Town Clerk  
Town of Corte Madera  
300 Tamalpais Drive  
Corte Madera, CA 94925  
Phone number: 927-5086

Unless otherwise directed by the District Superintendent, whoever responds first to the sewer backup should complete the Sewer Overflow Report Form (see Tab 6) before leaving the site of the sewer backup, if at all possible. Take as many photos as needed to accurately represent the extent of the damage. The information requested on the form may be very important to a fair settlement of a claim.

If it is determined, after a sewer backup, that the homeowner does not have a Backflow Prevention Device (BPD), explain that one is needed to prevent future backups into the home. Tell the homeowner that when there is a blockage in the sewer system, it would normally rise through a manhole and flow to the surrounding area. Explain that if the house plumbing is below the level of an overflowing manhole it can back up through a lateral line and enter the home. After this explanation, do the following:

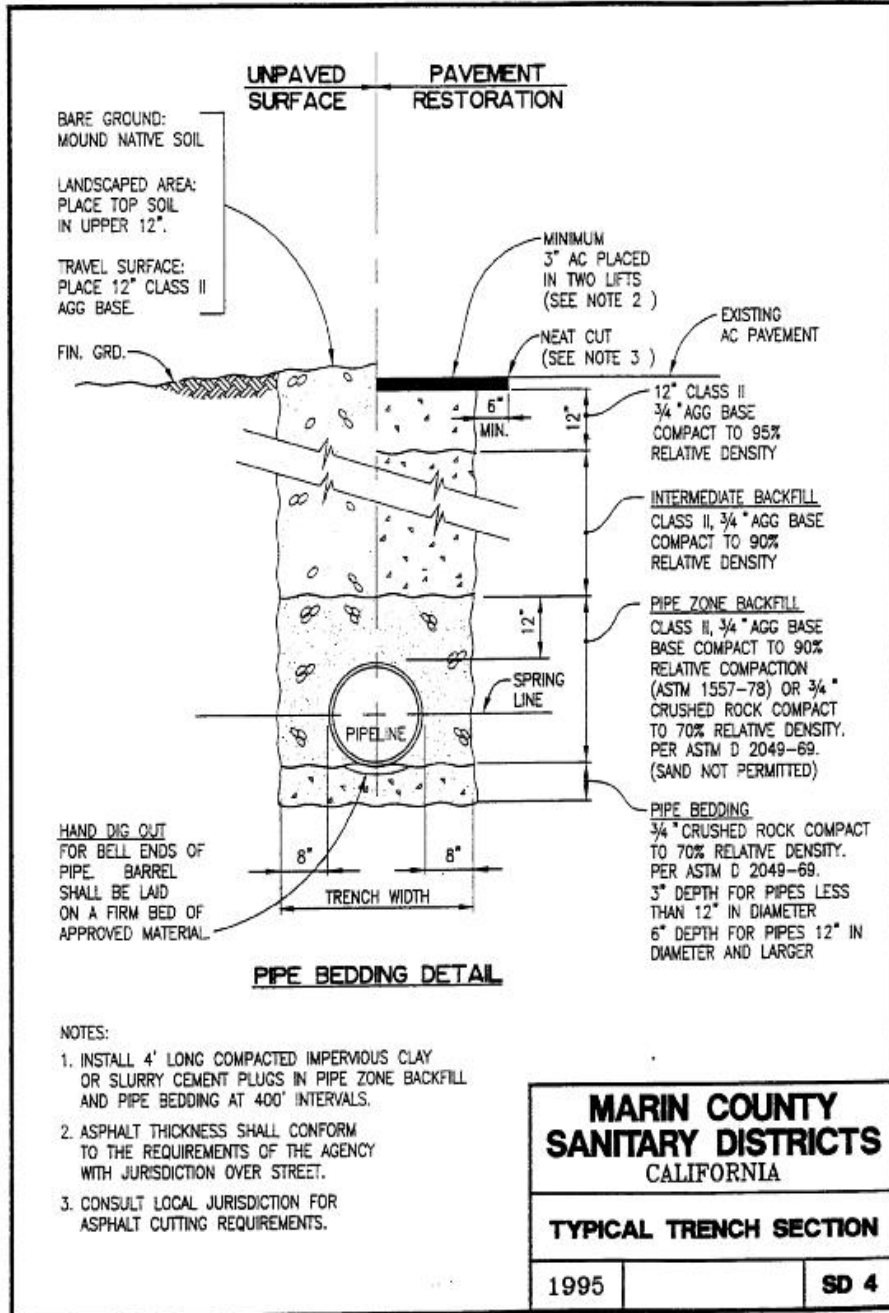
1. Tell the homeowner that he/she is responsible for having a BPD installed.
2. Explain that it's a plumber's job and the cost varies depending on the complexity of the job.
3. Tell the homeowner that the District has to approve the BPD and installation. Explain that the plumber should contact the District at 415-927-5057 to obtain a Sanitary Sewer Permit for approval prior to installation of the Backflow Prevention Device.
4. If necessary, use the BPD diagrams (2-5 and 2-6) to explain how the BPD works.
5. Answer whatever questions that come up as best you can, but refer the homeowner to the office of Sanitary District No. 2 for additional information.
6. If the homeowner expresses interest in Section 21.20.040, Backflow Prevention Devices, of Title 21, Sanitary District No. 2 of Marin County, have him or her contact the District office at 415-927-5057 for a copy. The same section for BPD can be viewed on Tab 2-8.





# Typical Trench Section

2-7



Sanitary Code for Backflow  
Prevention Device (BPD)

2-8

TITLE 21

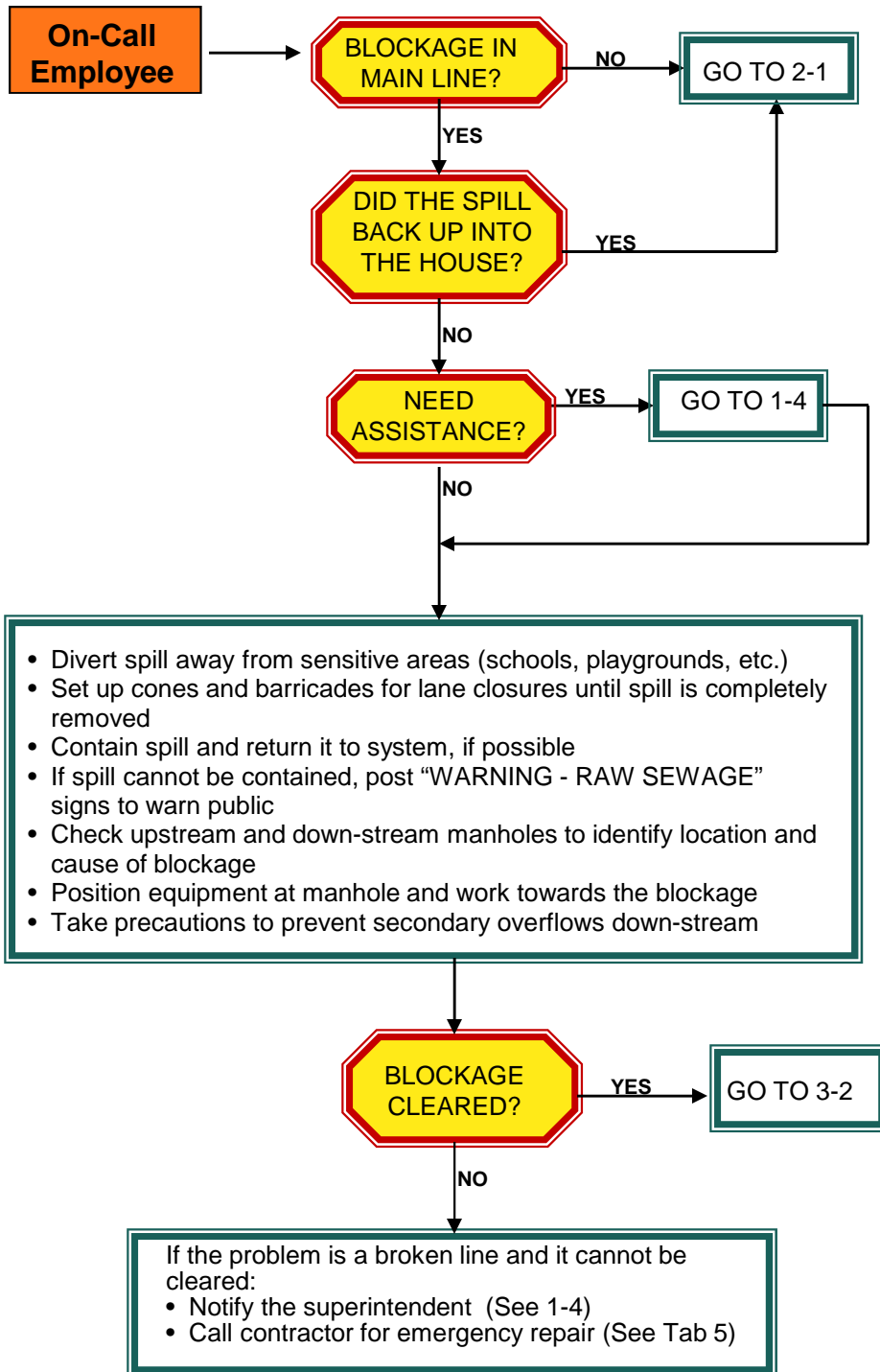
SANITARY DISTRICT NO. 2 OF MARIN COUNTY

Section 21.20.040: BACKFLOW PREVENTION DEVICES

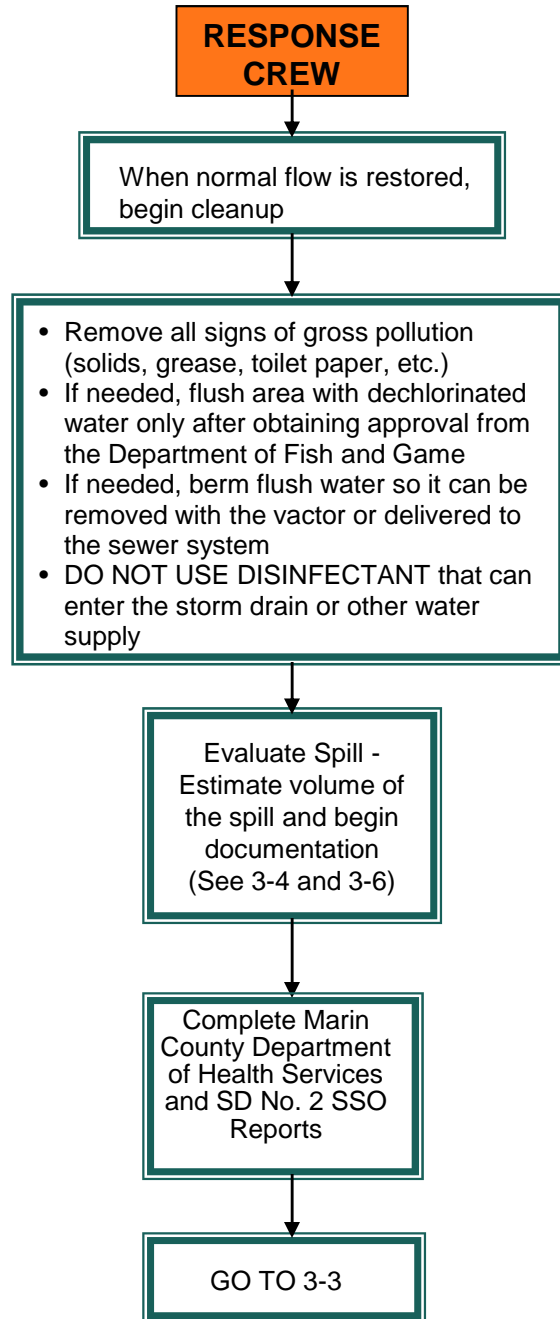
Backflow prevention devices shall be required on all existing and new laterals. The type and installation requirements shall be as set forth in the District's standard specifications and drawings. (San. Dist. No. 2 Ord. 34 § 2 (part), 2002)

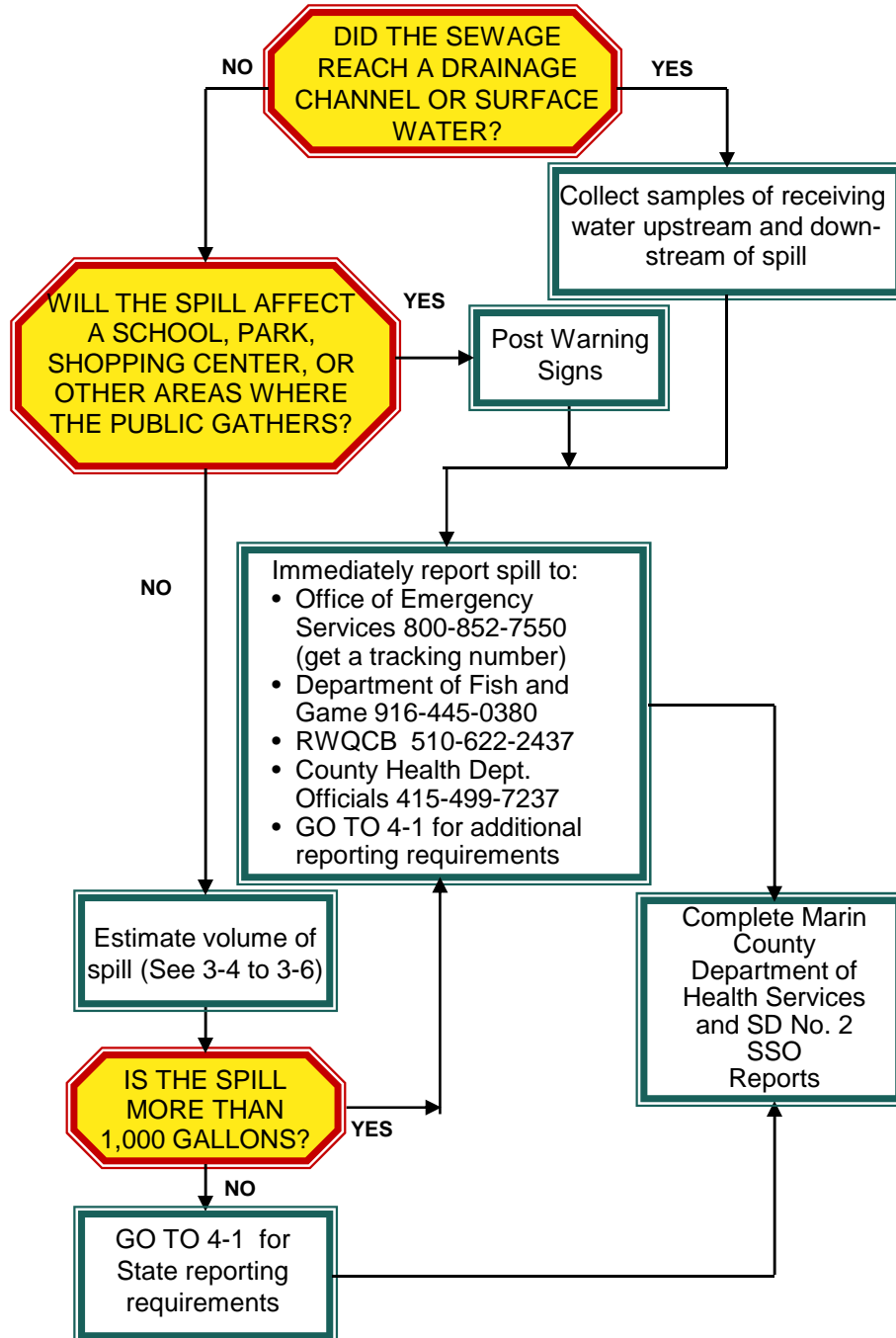
# Outside Initial Response

3-1









**METHOD 1: EYEBALL ESTIMATE**

This method can be useful for small spills up to 100 gallons. To use this method, imagine the amount of water that would spill from a bucket or 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 multiply by 50 gallons.

**METHOD 2: MEASURED VOLUME**

Most small spills can be estimated with this method. The shape, dimensions, and depth of the spilled wastewater are needed. The shape and dimensions are used to calculate the area of the spill and the depth is used to calculate the volume.

Step 1 - Sketch the shape of the contained sewage

Step 2 - Measure or pace off the dimensions

Step 3 - Measure the depth at several locations

Step 4 - Convert the dimensions including depth to feet

Step 5 - Calculate the area using the following formulas:

Rectangle      Area = length x width

Circle          Area = diameter x diameter x 0.785

Triangle        Area = base x height x 0.5

Step 6 - Multiply area times the depth to obtain volume in cubic feet

Step 7 - Multiply the volume by 7.5 to convert it to gallons

**METHOD 3: DURATION AND FLOW**

This method is used when it is difficult or impossible to measure area and depth. The volume of the spill is estimated by multiplying the duration (in hours or days) by the flow rate (in gallons per hour or gallons per day).

Duration

The time elapsed from the start of the spill to the time the spill has stopped. The following are some approaches that can be used to estimate duration.

**Start time:** Initially, there will be limited deposits of grease and toilet paper at the spill site. After a few days, the grease forms a light-colored residue. After a few weeks, the grease turns dark and the quantity of toilet paper and other materials will increase. These changes can be used to estimate start time in the absence of other information.

**End time:** The time is estimated by observing the “blow down” that occurs when the blockage has been removed.

Flow Rate

Flow rate is the average flow leaving the sewer system at the time the spill has stopped. Three ways to estimate the flow rate are:

San Diego Manhole Flow Rate Reference Sheet (See 3-5). This sheet shows the sewage flowing from a manhole cover for a variety of flow rates.

Changes in flows in the downstream flow meters can be used to estimate the flow rate during the spill (better for large SSOs).

Once the location of the spill is known, the number of upstream connections can be determined from the field maps. Multiply the number of connections by 150 gallons per day per connection or 8-10 gallons per hour per connection.

Once the duration and flow rate have been estimated, the volume of the spill is the product of duration in hours or days times the flow rate in gallons per hour or gallons per day.



Wastewater Collection Division  
(619) 654-4160



58 gpm



200 gpm



275 gpm

**Reference Sheet for Estimating Sewer Spills  
from Overflowing Sewer Manholes**  
*All estimates are calculated in gallons per minute (gpm)*



25 gpm



150 gpm



250 gpm



City of San Diego  
Metropolitan Wastewater Department



5 gpm



100 gpm



225 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

rev. 4/99

### **INITIAL NOTIFICATION:**

Any discharge of sewage that results in a discharge to a drainage channel or a surface water, District Staff shall, as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, County Health Department Officers, and the Regional Water Quality Control Board.

As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or surface water, the District Staff shall submit to the Regional Water Board a certification that the State Office of Emergency Services and the County Health Officers have been notified of the discharge.

### **SANITARY SEWER OVERFLOW REPORTING**

#### **Category 1 Discharge:**

Discharge of sewage resulting from a failure in District's sewer system that: equal or exceed 1000 gallons; result in a discharge to a drainage channel and/or surface water; or a discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

#### **Category 2 Discharge:**

Any other discharge resulting from a failure in the District's sanitary sewer system.

### **SSO REPORTING TIME FRAMES**

Category 1 SSOs, in addition to the above initial notification requirements, shall be reported as soon as: the District Staff has knowledge of the discharge; reporting is possible; and reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than three (3) business days after the District is made aware of the SSO. A final certified report must be completed within fifteen (15) calendar days from the conclusion of the SSO response and remediation.

Category 2 SSOs must be reported to the Online SSO Database within thirty (30) days after the end of the calendar month in which the SSO occurs.

### **SSO ELECTRONIC REPORTING SYSTEM (ERS)**

After a SSO event staff must submit SSO reports through the State Water Board's web-based SSO ERS at <http://ciwqs.waterboards.ca.gov/ciwqs/>. The Director of Public Works, The Director of Field Maintenance and Operations, and the Asst. Superintendent of Public Works are authorized to report on the State SSO ERS.

### **ANNUAL REPORT**

An annual report for the January 1 to December 31 reporting year must be submitted no later than March 15 of the following year. At a minimum, the annual report must include the following:

One or more charts showing trends in the number, volume, and causes of SSOs, and by location of SSOs, experienced during the reporting year.

Discussion or any data and potential deficiencies/redundancies in the monitoring system of reporting program.

The report must be certified and signed by either a principal executive officer or a ranking elected official. The report must be certified with the following statement:

"I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Submit one paper copy (required) of the report and one electronic PDF copy (requested but not required).

## Contractors for Emergency Repairs

5-1

If the contracted services require more than one day of work, the expenditure must be authorized by the District Superintendent.

For force main or pipeline repair call:

Maggiora & Ghilotti, 555 Dubois St., San Rafael	415-459-8640
After hours: Gary Ghilotti, President/Owner	(H) 415-897-6349
Team Ghilotti, 2531 Petaluma Blvd. S. Petaluma	707-763-8700
Glen Ghilotti, Owner	(C) 415-720-5936
Ghilotti Bros., 525 Jacoby St., San Rafael	415-454-7011
Dave Mariani, Regional Mgr.	(C) 415-720-4451
	(H) 415-457-4121
Michael Ghilotti, Chief Operating Officer	(C) 415-760-0700
	(H) 415-492-8840
North Bay Construction	
102 D Street, Petaluma	707-763-2891
After hours: Steve Geney	707-769-1613
Terry Coffee	707-763-2849

For welders call:

Zappetini Welding (Russ)	415-454-2511
Sun Ironworks	415-453-7562
Victor's Ironworks (Al)	415-454-6284
Irish Welding	415-488-0230

For large (4,000 gallons) tank truck call :

Universal Environment (Benicia)	707-747-6699
Synagrow Technologies (headquarters in Corona)	909-277-2662
Suisun City Office	707-438-3730
Daniel Miller	(C) 510-772-1837
Redwood Sanitary Service	707-762-1610

For small (2,000 gallon) tank truck call Roto-Rooter	415-898-2700
Roy's Sewer Service	707-763-0226

For diesel fuel call Royal Petroleum (24 hrs)	415-454-4066
or Bay Cities Oil	800-937-2266