Sonoma County Water Agency

Spill Response and Notification Plan

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SUMMARY AND RECOMMENDATIONS

The Spill Response and Notification Plan defines the Sonoma County Water Agency (Water Agency) plans, procedures and requirements for responding**,** remediating and reporting spills from sewers and lift stations. The Spill Response and Notification Plan (SRNP) was developed for use in the 9 Water Agency-managed sanitation facilities, and could be adopted by other water and wastewater agencies in the Russian River and nearby watersheds to provide a consistent regional response to sewer and lift station spills. The SRNP was developed to satisfy terms and conditions of the California Regional Water Quality Control Board, North Coast Region, Administrative Civil Liability (ACL) Complaint No. 99-52 (July 22, 1999) issued to the Water Agency.

The purpose of the SRNP is to assure a prompt and appropriate level of response is made to every reported sewage spill received by the Water Agency so that adverse effects to public health, water quality, the environment, and public and private property can be minimized. The SRNP further includes provisions to ensure notifications and reports are made to the appropriate local, state and federal authorities, and that response actions taken by the Water Agency are properly documented. By responding promptly with adequate resources to sewage spills, and promptly providing regulatory agencies with required spill notification and spill reports, the risk of enforcement actions against the Water Agency and sanitation systems can be minimized.

The core elements of the SRNP are the spill response procedures, and the regulatory agency spill notification and reporting requirements. The SRNP provides continuity between core elements, from the initial receipt of a spill notification through completion of the regulatory spill report. In addition to these core elements, the SRNP also addresses public notification procedures, public education, public outreach, resource sharing, mutual aid agreements, training and SRNP updating. These additional elements are essential to the maintenance and development of the SRNP.

The SRNP was developed in cooperation with Water Agency staff, the North Coast and San Francisco Bay Regional Water Quality Control Boards, the Sonoma County Department of Health Services, the California Department of Fish and Game, and the cities of Santa Rosa, Ukiah, Healdsburg, and Rohnert Park. The spill response and notification requirements were developed through interviews with the staffs from Water Agency and regulatory agencies, and cooperative meetings attended by regulatory agencies and participating cities. Additional spill response information was collected through telephone interviews with State, Federal and Local agencies, as well as from other cities and sanitation agencies with written spill response plans.

Spill Response Assessment and Recommendations

During the Water Agency interviews and cooperative meetings several spill response issues were identified that could hamper effective spill response and regulatory agency notification. As described below the SRNP addressed these issues, and provided additional recommendations that could be implemented to further address these issues.

Prior to the development of the SRNP, the Water Agency had developed a spill response procedure based on information from the San Francisco and the North Coast Regional Water Quality Control Boards. However, variations in spill notification and reporting requested by the two regional water quality boards caused the Water Agency some confusion. The SRNP has attempted, where possible, to standardize the regulatory agency notification requirements for sewage spills. To avoid confusion in the future, the SRNP identifies the specific notification requirements of the regulatory agencies, including the North Coast and San Francisco Regional Water Quality Control Boards, the California Office of Emergency Services, the Sonoma County Department of Health Services, and the California Department of Fish and Game.

Managing the various spill response activities was an area of concern. The response activities often involve several Water Agency groups. The Water Agency had developed responsibilities of the different groups with respect to spill response. The SRNP strengthened these responsibilities by clearly defining the responsibilities of individuals and groups in spill response activities and stressing communication during and following a spill.

Additional spill documentation was also included in the SRNP. The SRNP includes photographs, video, and sketches of spill conditions in spill documentation. Aids for estimating spill quantities and rates were also included in the SRNP.

One problem recognized by the Water Agency is the travel time to some of the managed systems. This may delay the arrival of the response crew and equipment at the spill site. For this reason, spill response is and should continue to be given a high priority within the Water Agency. When delays in response crew and equipment are expected, alternative equipment and crews should be dispatched to the spill site to begin containment and control until required equipment arrives. Spill response agreements should also be investigated with cities or agencies nearby the more remote sanitary systems to provide spill response or aid for reported spills.

During normal working hours, the Water Agency has adequate on duty staff for spill response. Staff availability outside of normal working hours may limit spill response crew effectiveness in some situations. Of most concern are spills occurring in high traffic or residential areas, or spills requiring additional resources or equipment due their magnitude or location. Alternative recommendations in the SRNP include: increasing the standby crew from two to three; arranging for traffic control support by local police, local fire department, or other agencies; including the standby wastewater operator in all spill response activities; or arranging for outside help from nearby cities, agencies or service contractors.

Wet weather spills are also a point of concern with respect to staff and equipment availability. Infiltration and inflow during wet weather can increase sewer flows significantly. As a result, spills in wet weather are generally larger than dry weather spills and there is an increased potential for multiple spills to occur. To improve wet weather spill response, equipment and supplies can be deployed ahead of time to reduce response time to areas with known wet weather overflow potential. The development of spill response aid agreements can also help provide additional staff and resources to handle wet weather spills during normal and outside of normal working hours. Additional standby crews should be considered for wet weather conditions outside of normal working hours.

Training is an important component of the SRNP. It assures that spill response and notification procedures and requirements are understood by the Water Agency staff involved in spill response activities. The SRNP recommends that Water Agency personnel receive spill response training once per year, and that collection maintenance crews attend periodic tailgate training sessions throughout the year. The annual training further stresses the importance of spill response and keeps staff apprised of any changes in the SRNP.

The SRNP recommends further investigation into mutual aid agreements and resource sharing with other area agencies and cities. Aid specific agreements for spill response and resource sharing provide opportunities to improve spill response time and increase available resources. Mutual aid agreements, such as the Water Agency Response Network (WARN), should also be considered for obtaining, or providing, wastewater treatment and collection system aid under emergency conditions. Other opportunities for sharing resources, such as spill response training and public outreach and education activities are discussed in the SRNP.

In the area of public information, it is recommended that the Water Agency develop policies and procedures for issuing public information and notices. The SRNP includes suggestions for posting signs, issuing public advisories, and notifying the media with respect to sewer spills. Development of standard Water Agency public information policies would help better define responsibilities for handling all Water Agency public information and notices.

The Water Agency has begun developing public outreach and education materials for its wastewater operations. The continued development of these public outreach materials to specifically address wastewater collection systems and spill response activities should be supported and encouraged by the Water Agency. This will foster a greater public awareness of the Water Agency's role and responsibility in wastewater management, and inform the public of activities that could impair the operation or performance of the wastewater treatment or collection systems.

SECTION 1
INTRODUCTION

Pursuant to terms and conditions of the California Regional Water Quality Control Board, North Coast Region, Administrative Civil Liability (ACL) Complaint No. 99-52 (July 22, 1999), the Sonoma County Water Agency (Water Agency) was required to prepare a "supplemental environmental project" to the Executive Officer's satisfaction no later than July 31, 2000. That project is a comprehensive Spill Response and Notification Plan (SRNP) which will be used by the Water Agency for all its operations within the region, and could be utilized by all other water and wastewater agencies in the Russian River watershed. Furthermore, the complaint required that the SRNP specifically address public notification, public education, public outreach, notification procedures, resource sharing, mutual aid agreements, training and a system for debriefing and plan modifications following spill events.

Purpose of the Spill Response and Notification Plan (SRNP)

The purpose of the Spill Response and Notification Plan (SRNP) is to assure prompt and appropriate response to every report of a possible sewage spill received by the Water Agency so that any adverse effects to public health, water quality or customer service due to a confirmed sewer overflow can be minimized. The SRNP further includes provisions to ensure notifications and reports are made to the appropriate local, state and federal authorities. For the purpose of the SRNP, "confirmed sewage spill", or "spill", is also sometimes referred to as "sanitary sewer overflow", or "SSO"; "SO"; "overflow"; or "pumping station overflow". The SRNP is effective, upon written approval of the Executive Officer of the California Regional Water Quality Control Board, North Coast Region.

Codes, orders, complaints and other directives, which provide the authority to prepare and implement the SRNP include:

State:

- California Regional Water Quality Control Board, North Coast Region, Contingency Planning and Notification Requirements for Accidental Spills and Discharges, Order No. 74-151;
- California Regional Water Quality Control Board, North Coast Region, Administrative Civil Liability, ACL Complaint No. 99-52, in the Matter of Russian River County Sanitation District for Violations of Waste Discharge Requirements, and the Water Quality Control Plan for the North Coast Region (Basin Plan); and the Water Agency for Violations of the Basin Plan;
- Government Code, Title 2, Division 1, Chapter 7, California Emergency Services Act, Article 14.

- Title 23, California Code of Regulations, Division 3, Chapter 9.2 Section 2250 and 2260
- California Water Code Section 13260 and 13271

Water Agency:

- Water Agency Response Network (II-WARN), 1996 Omnibus Mutual Aid Agreement;
- Emergency Operations Plan, Part IV.G. Water Contamination Plan

Objectives

The primary objectives of the SRNP are to:

- Protect public health, wastewater treatment plant and collection system personnel, and the environment,
- Comply with requirements governing the procedures for managing sewer overflows, and
- Minimize the risk of enforcement actions against the Water Agency and sanitation systems.

Additional objectives of the SRNP are as follows:

- Protect the collection system, pumping stations, wastewater treatment facilities, and all appurtenances;
- Protect private and public property adjacent to the collection and treatment facilities; and,
- Provide prompt response to spill reports, a thorough clean up of spill site, and prompt resolution of property damage.

Incorporated under Part IV. Contingency Plans (Field Operations) of the Sonoma County Water Agency Emergency Operations Plan (EOP), the content of the SRNP shall not supersede any other aspects of the EOP or other Water Agency Standard Operating Procedures (SOPs) where contradictions or ambiguities exist unless determined and directed otherwise by the General Manager/Chief Engineer. The EOP will be updated to include the SRNP procedures within three months of the North Coast Regional Water Quality Control Board's final written acceptance of the SRNP.

Organization of Plan

The key elements of the SRNP are addressed individually:

Section 2.0	Overflow Response Procedure
Section 3.0	Monitoring/Sampling of Surface Waters Affected by Major Sewer Spills
Section 4.0	Public Notification and Advisory Procedure

Section 5.0 Regulatory Agency Notification Procedure

Section 6.0 Media Notification Procedure

Section 7.0 Public Education and Outreach

Section 8.0 Resource Sharing and Mutual Aid

Section 9.0 Training Program

Section 10.0 Distribution and Updating of SRNP

Definitions of Pertinent Terminology

Appendix E, Glossary of Terms contains selected terms and definitions used in the SRNP.

Spills to surface waters can involve special reporting, notification, sampling and cleanup. For the purpose of the SRNP, surface waters are defined as, or consist of, the following, which were derived from the North Coast Region Water Quality Control Plan:

- Coastal Waters-Waters of the Pacific Ocean outside of enclosed bays and estuaries, which are within the territorial limits of California.
- Enclosed Bays- Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays will include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay.
- Estuaries, and Coastal Lagoons- Waters at the mouths of streams that serve as mixing zones for fresh water and ocean water during a major portion of the year. Mouths of streams, which are temporarily separated from the ocean by sandbars, shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and saltwater occurs in the open coastal waters.
- Perennial Streams –Any stretch of stream that can be expected to flow continuously or seasonally. They are general fed in part by springs.
- Flowing Ephemeral Streams–An ephemeral stream is an observable watercourse that flows only in direct response to precipitation. It receives no water from springs and no long-continued supply from melting snow or other surface source. Its stream channel is at all times above the local water table. Any watercourse that does meet this definition is to be considered a perennial stream. For spill response, a flowing ephemeral stream will be considered as surface water as any spill to it will be carried downstream to surface water. Surface water sampling should be conducted in the ephemeral stream.

- Flowing Storm Drain-A flowing storm drain is a constructed drain that carries flow only in direct response to precipitation. For spill response, a flowing storm drain will be considered as surface water as any spill to it will be carried downstream to surface water. Surface water sampling should be conducted in the downstream surface water and not in the storm drain.

- Fresh Water Impoundments-Fresh water impoundments are those suitable for use as a domestic, municipal, or agricultural water supply and which provide habitat for fish and wildlife.

Dry storm drains and dry ephemeral streams will be considered dry land spills and, except for the California Department of Fish and Game, do not require regulatory agency spill notification for spills reaching surface waters. The California Department of Fish and Game requires notification of spill to storm drains that have the potential to discharge to surface waters. Cleanup and notification required for dry land spills will apply to dry storm drains and dry ephemeral streams. If a spill reaches surface water via a dry storm drain or dry ephemeral stream, then the spill will have occurred at the point of entry into the surface water. Note that the California Office of Emergency Services (OES) requires notification for spills in excess of 1,000 gallons that could have reached surface water if not for the actions of the responding agency.

Maintenance Crew Report of Spill or Stoppage Database

The Operations Engineering, Laboratory/Environmental Compliance Services Section, maintains the Maintenance Crew Report of Spill or Stoppage database. The database is an electronic file, which tracks the frequencies, causes and locations of sewer overflows and pumping station overflows. The database should assist the Maintenance and Engineering & Resource Planning sections in directing capital-type corrective measures and to prioritize maintenance activities where chronic problems have been historically encountered. The database fields are similar to those on the Maintenance Crew Report of Spill or Stoppage (See Appendix A).

After an overflow event, the Collection System Maintenance Section will investigate the event to establish the following:

- The cause of a sewage overflow.

- The conditions a minimum distance of one eighth (1/8) of a mile (660 feet) upsewer and downsewer from the site of the sewage overflow that could have contributed to the overflow by conducting the appropriate sewer inspection, such as manhole inspections, CCTV inspection, smoke testing, or grease trap inspections.

- The need to adjust the Preventive Maintenance (PM) schedule for the affected sewer(s) for cleaning and inspecting in order to prevent similar future occurrences. The site of the sewage overflow will remain on the adjusted PM schedule, if necessary, until it is reasonably determined that the site is no longer a risk for a future occurrence. At that time, a new PM schedule will be determined.

- The need to communicate with customers or other parties whose actions may have contributed to an overflow such as employees and managers of restaurants, manufacturers, construction contractors, etc. Communications could include providing: information on relevant codes and ordinances applicable to the given parties and type of business operation; the requirements to comply with the given ordinance; and the measures to take by the given party to eliminate future overflows. The Collection System Maintenance Section will coordinate its investigative efforts with Laboratory/Environmental Compliance Section.

Scope of Work

The development of the Spill Response and Notification Plan involved the following tasks:

- Background Research
- Cooperative Meetings
- Develop Spill Response and Notification Plan
- Public Education and Outreach
- Resource Sharing and Mutual Aid
- Training Program

Background Research:

Background research involved the collection and review of spill response and notification information. The sources of information included regulatory agencies, the Water Agency, cities and sanitation agencies, websites, and published spill response planning and procedures. The background information was collected from the Cooperative Meetings, by telephone interviews and meetings with regulatory agencies, cities and sanitation agencies, and the Water Agency.

The background research included collection and review of up to five spill response plans from other cities or sanitation agencies. Spill response plans and information was obtained from four sanitation agencies and two cities by telephone interviews. The City of Santa Rosa also provided spill response information and a copy of their plan during the Cooperative meetings. Two of the interviewed cities and two of the interviewed agencies provided copies of their response plan. Two additional response plans were obtained from cities without interviewing city staff. Mutual aid information was also collected during the telephone interviews of which only two reported having written mutual aid agreements; other cities and agencies did not have mutual aid agreements. The collected spill response plan information is summarized in the Spill Response Plan Memorandum.

Regulatory agency spill notification and reporting requirements were obtained by telephone interviews. Regulatory agencies contacted were the North Coast and San Francisco Bay Regional Water Control Boards, the Sonoma County Department of Health Services, the California Department of Fish and Game, Sonoma County Department of Emergency Services, California Department of Health Services, US Environmental Protection Agency, and the California Highway Patrol. Information was also obtained from the California Office of Emergency Services, the State Water Resources Control Board, the US Fish and Wildlife Service, and the National Marine Fisheries Service web sites.

Telephone interviews and meetings with Water Agency staff were held to obtain information on Water Agency spill response and notification plans and capabilities. Interviews were conducted with Wastewater Operations, Maintenance Worker Services, Operations Engineering, Laboratory/Environmental Compliance Services, and Public Information/Education.

Background information contacts and reference information is included in the Spill Response and Notification Plan references.

Cooperative Meetings:

Four cooperative meetings were held during the development of the Spill Response and Notification Plan. Municipalities in Sonoma County and in the Russian River Basin and regulatory agencies were invited to participate in the cooperative meetings. The objective of the cooperative meetings was to share information on spill response and notification requirements. The cooperative meetings were held on the following topics:

- Introduction on the objective and development of the Spill Response Plan
- Regulatory notification requirements and reporting
- Public Information/Outreach and Training
- Mutual Aid and Training

One final cooperative meeting will be held to present and discuss the Spill Response and Notification Plan.

Develop Spill Response Plan:

This task involved developing the SRNP based upon the information collected in the background research and cooperative meetings. The Spill Response Plan included the development of the following:

- Spill Response Procedures
- Public Education and Outreach
- Resource Sharing and Mutual Aid
- Training

Spill Response Procedures:

Spill response procedures were developed from collected background information. The response procedures developed include receiving an initial spill report, responding to the spill, notifying regulatory agencies and the public, remediating the spill, and documenting the spill and actions taken. The plan also discusses sampling requirements for spills reaching surface waters, procedures for the distribution and updating of the SRNP, and the process (spill response debriefing) the Water Agency will use to assess a spill response. Forms and reports used by the Water Agency were reviewed and revised to conform to the elements of the SRNP, and are included in the SRNP appendices.

Public Education and Outreach:

The SRNP identifies possible public information activities that could benefit the Water Agency's wastewater collection, treatment, and spill response.

Resource Sharing and Mutual Aid:

Resource Sharing and Mutual Aid was evaluated and recommendations provided in the SRNP. Alternative mutual aid approaches taken by various cities and agencies, which include general mutual aid agreements, such the Water Agency Response Network (WARN) agreements**,** and aid specific agreements are discussed in the SRNP. The Water Agency resources and spill response capability were assessed and recommendations regarding spill response staffing, mutual aid, and additional resources and supplies that were developed and included in the SRNP.

Training Program:

Training program requirements were developed and included in the SRNP. The training program contains the information to conduct training for the SRNP. The training program is based on the SRNP information and procedures, and identifies the SRNP materials to be used in the training sessions.

SECTION 2

OVERFLOW RESPONSE PROCEDURE

The Overflow Response Procedure presents a strategy for the Water Agency to mobilize labor, materials, tools and equipment to correct or repair any condition which may cause or contribute to: 1) an unpermitted discharge to jurisdictional waters of the United States (surface water); and, 2) sewer overflows and lift station overflows to dry land which are successfully contained and present no threat to surface water. The plan considers a wide range of potential system failures that could create a spill to surface water. Figure 2-1 provides a procedural flowchart showing the steps from receipt of a spill report through preparation of final spill event documentation.

Spills may result from blocked sewers, pipe failures, power outages or mechanical malfunctions among other natural and man-made causes. Maintenance and Operations Sections are on alert and shall respond immediately upon receipt of notification of a possible overflow.

The following overflow response procedures are presented:

- Receipt of Information Regarding a Sewer Overflow or Lift Station Overflow
- Dispatch of Appropriate Crews to Site of Sewer Overflow
- Response to Lift Station Failure
- Overflow Containment, Correction and Cleanup
- Additional Measures Under Potentially Prolonged Overflow Conditions
- Notification
- Reporting Spills to Waterways or Spills to Dry Land

Receipt of Information Regarding a Sewer Overflow or Lift Station Overflow

Water Agency employees or others may detect a sewer overflow. The Water Desk Operator answering telephone calls dialed to “707-523-1070” is responsible for handling phone calls from the public on possible sewage overflows from the wastewater collection system and transmission system (e.g., sewer pipes and lift stations) and for notifying the Collection System Maintenance Coordinator and Coordinator in Operations.

<u>The Water Desk Operator takes calls 24 hours per day, every day of the year</u>

1) The attending Operator shall record as much information as possible that is known about the spill by the caller and other relevant information regarding the overflow using the "Initial Report of Spill or Stoppage" form, Appendix A, including:

   a. Time and date the call was received.

   b. Full name of reporting party.

   c. Phone number(s) of the reporting party.

   d. Additional contact information (Reporting party address, current location).

   e. Location of problem (Address, cross street, nearby business, landmark, etc.).

   f. Whether spill is in an area with high public traffic.

   g. Special circumstances such as vehicle traffic, school proximity, pedestrian traffic.

   h. Time spill was noticed.

   i. Spill continuing or stopped.

   j. Description of spill, such as "Clean" water or sewage (debris, odor, etc.).

   k. Estimated volume (description of size of ponded water).

   l. Estimated flow (if continuing to flow).

   m. Description of downstream area (gutter, ditch, field, storm drain, etc. to determine if spill can reach a creek or waterway).

   n. Additional information.

The operator will assign a report number to the form. The report number will consist of a nine-digit code. The report number code presented below includes the date, district and spill count.

- Six digits are used to represent the month, the day of month, and year. For example **120600** is the date for December 6, 2000;

- The district codes are:

  AP-Airport/Larkfield/Wikiup

  GY-Geyserville

  OC-Occidental

  PG-Penngrove

  RR-Russian River

  SO-South Park

SRC-Sea Ranch Central

SRN-Sea Ranch North

SV-Sonoma Valley

- The spill count is an alphabetical (A, B, C) listing for the multiple spills occurring in each district on the same day. A for the first spill, B for the second spill and so on.

The combined code for spills in the Russian River County Sanitation District would be as follows:

120600RRA - First spill on December 6, 2000 in Russian River

120600RRB - Second spill on December 6, 2000 in Russian River

120800RRA - First Spill on December 8, 2000 in Russian River

The report number assigned to the Initial Report of Spill or Stoppage form will be used on all other internal Water Agency forms and reports related to this spill. The completed three-hole form is filed into the "Spill Response" three-ring loose leaf binder kept at the Water Desk under the appropriate tab. A copy is sent to the Operations Coordinator, and the Collection System Maintenance Coordinator. A copy is also faxed to Public Information at 707-528-2080. In addition, appropriate journal entries are made in the Operator's Daily Log, which is kept at the Water Desk.

2) The Water Desk Operator should immediately notify the reported sewage overflows to the Collection System Maintenance Coordinator. If there is indication that the spill is running to a creek or storm sewer, the Water Desk Operator should immediately notify the Operations Coordinator as well. Notification shall first be by telephone (using home or work number depending on the time of day, and day of the week), then by Nextel telephone unit, and then by digital pager. If no response is received within five (5) minutes of sending a page, the Water Desk Operator shall notify the next Coordinator in descending order on the telephone/contact list kept at the Water Desk for emergency and spill response.

3) Sewage overflows detected by any Water Agency personnel in the course of their normal duties shall be reported immediately to the Water Desk Operator by two-way radio or by telephoning "707-523-1070".

4) Until confirmed by a Water Agency staff member, the reported possible spill or overflow should not be referred to as a "sewage overflow" or "unpermitted discharge."

Dispatch of Appropriate Crews to Site of Sewer Overflow

The purpose of immediate response to a failure of any element within the wastewater collection and lift station systems is to isolate and correct the problem. Collection system and lift station sewage spills will be given a high priority for crews and equipment. Also, available operations and maintenance personnel, materials and equipment shall be called in if extra resources are needed.

1) Dispatching Crews

- The Collection System Maintenance Coordinator shall direct the appropriate crews, materials, supplies, and equipment to be deployed. The Collection System Maintenance Coordinator shall dispatch the crews by direct contact, mobile radio, or telephone or will request the Water Desk Operator to make direct contract. All employees dispatched to the site of a sewage overflow shall proceed immediately to that site. Any delays or conflicts in assignments must be immediately reported to the appropriate Coordinator for resolution.

- If the reported spill has reached surface water, or may reach surface water, the Operations Coordinator will dispatch a Wastewater Operator or Environmental Compliance Inspector or approved alternate to the spill site for sampling. Before arriving at the spill site, the Wastewater Operator/Inspector shall obtain sample bottles and equipment needed to conduct the required sampling.

- The Water Desk Operator or other personnel communicating with the responding crews shall ensure that the entire communication is received and acknowledged. To avoid delay, all standard communications procedures shall be followed.

- Responding crew shall report their findings, including damage to private and public property, to their Coordinator with updates as frequently as necessary to keep him/her abreast of the conditions.

- Coordinators and the Water Desk Operator shall assist, as necessary, to transfer all pertinent information to the next shift, including any details of the problems and observations described by the person who initially reported the spill**,** and the status of ongoing corrections, repairs and cleanup. Spill response crews being relieved at crew shift changes shall discuss the problems, observations, conditions and the status of ongoing corrections, repairs and cleanup with the next shift. The names of contacts, and notifications made by the spill response crew shall also be provided to relieving crew.

2) Additional Resources

Based on the information provided by the responding crew, the Collection System Maintenance Coordinator shall directly call for additional support if needed, or shall direct the Water Desk Operator to do so.

- The Water Desk Operator shall convey to the Maintenance Coordinator any responding crews requests for additional personnel, material, supplies, and equipment. In addition to the Water Agency's existing resources, additional support may be obtained through Mutual Aid agreements or Water Agency "blanket purchase order" construction contractors.

- If the spill has or will reach surface water, the responding crew shall contact the Water Desk Operator to notify the Operations Coordinator, to request that a Wastewater Operator/Environmental Compliance Inspector be sent to the site for sampling.

3) Field Supervision and Inspection

- The Collection Systems Maintenance Coordinator or other members of the Maintenance Supervision Group should periodically visit overflow sites during all phases of the spill response, if possible, to assure that provisions of this overflow response plan and other directives are met. If possible, the Collection Systems Coordinator or Operations Coordinator should visit the site at least once during a major spill event. This will also assist in the spill event debriefing and the assessment of need for revisions and updates to the SRNP.

- The Collection System Maintenance Coordinator shall be responsible for confirming that the Maintenance Crew Report of Spill or Stoppage form (Appendix A) is received and entered into the database for purposes of completing the Wastewater Stoppage/Overflow Report. The Mechanic Coordinator shall provide a description of the cause of the spill for the appropriate reports for a lift station overflow.

4) Coordination with Hazardous Material Response

- If the responding crew members encounter a suspicious substance or odor (e.g., oil sheen, foamy residue, gasoline) on the ground surface, or surface water not common to the sewer system, the response crew shall immediately notify the Collection System Maintenance Coordinator or the Water Desk Operator if the Collection System Maintenance Coordinator is not available.

- The Collection System Maintenance Coordinator or Water Desk Operator shall contact the Agency's hazardous material response team and the County of Sonoma's hazardous material response team. The responding crew shall await the arrival of the hazardous response teams to possibly take over the scene.

  Remember that any vehicle engine, portable pump or open flame (e.g., cigarette lighter) can trigger an explosion or fire where flammable fluids or vapors are present. Keep a safe distance and observe caution until assistance arrives.

  The responding crew shall also take measures to assist in keeping the general public away from the impacted area. Perimeter control of the spill area to pedestrian and vehicular traffic shall be established using traffic barricades, barricade warning tape, or temporary barrier/safety fencing with signage, "Caution Do Not Enter" where appropriate.

- Upon arrival of the hazardous material response team, the responding crew shall take direction from the HAZ-MAT lead person. Only when that lead person determines it is safe and appropriate for the responding crew to proceed under the SRNP with the sewer overflow containment, correction and clean-up activities, shall the responding crew proceed.

Response to Lift Station Failure

Water Agency personnel shall follow the procedure outlined below whenever a lift station fails. The same procedure is followed to repair a lift station to prevent a possible spill as well as to stop a spill. The Water Desk Operator or Maintenance Coordinator will dispatch a mechanic to the lift station for lift station troubleshooting and startup. The Water Desk Operator/Maintenance Coordinator will also notify a wastewater plant operator of the lift station failure, and if needed, can provide support for the mechanic. A Collection System Maintenance crew will be notified for site cleanup if required. An electrician may also be required depending on nature of the lift station failure. The steps taken to troubleshoot the lift station or to prevent and control a lift station overflow include:

- The mechanic or operator will switch lift station operation to a backup pump or lag pump. If the backup pump will not operate, continue with steps immediately below.
- Check electrical power, replace fuses or reset breakers. If there is still no power continue with steps immediately below.
- Request delivery of a portable power generator, if required, to the lift station to operate the lift station from the portable power generator.
- If power is available, but pump does not operate, check and clean floats, if necessary. Request delivery of a portable pump and set up a bypass pumping operation when practical.
- Operate portable pump by manual control if necessary to prevent or control an overflow. (Note: Caution shall be observed under manual operation so as not to cause an overflow at a downstream location or intensify an ongoing overflow.)
- Call the Water Desk for assistance.

Overflow Correction, Containment, and Cleanup

This section describes specific actions to be performed by the responding crews during a sewer overflow or lift station overflow.

The objectives of these actions are to:

- Protect public health, environment and property from sewage spills and restore the surrounding area back to normal as soon as possible.
- Establish perimeters and control zones with appropriate positioning of traffic cones and barricades, service vehicles, or use of natural topography (e.g., hills, berms, embankments) and mounded soil and sandbags.
- Promptly notify regulatory agencies' communication centers of preliminary spill information and potential impacts.
- Contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface water.

- Minimize the Water Agency's exposure to any regulatory agency penalties and fines, and other legal actions.

Under most circumstances, the Water Agency will handle response activities with its own work forces. The Operations and Maintenance Sections possess the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce problems elsewhere in the system. For example, the repair of a force main could require the shutdown of the lift station and possible diversion of the flow at an upstream location, or temporary storage in the wet well or upstream inlet piping. If the shutdown is not handled properly, sewage backup may create new spills.

Circumstances may arise when support from an outside construction contractor or Mutual Aid partner is required. This could occur when a deep and large diameter pipe requires an emergency repair in order to resolve the overflow and extensive shoring is necessary. The Collection Maintenance Coordinator shall be responsible to initiate a request for outside assistance, and has authority to make a direct request for assistance from outside contractors and suppliers on the EOP Approved Vendor list.

The first responsibility when arriving at the site of a sewage overflow is to protect the public health and safety by mitigating the impact of the overflow to the highest extent possible. The Water Agency shall take responsible actions to protect public health and water quality where the overflow is caused by facilities within the Water Agency's jurisdiction, or has been damaged by others resulting in a stoppage and backup into buildings, or overflows at private laterals. However, should the cause of the overflow not be the Water Agency's responsibility (e.g., an overflowing private sanitary sewer), but there is severe and imminent danger to public health, public or private property, or water quality, the Water Agency may take prudent emergency action until the owner can take control of the overflow.

Upon arrival at an overflow from the public sewer, the responding crew shall do the following:

- Take immediate steps to stop the overflow (e.g. relieve pipeline blockage, manually operate lift station controls, repair pipe, etc). Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way). Extra care should be taken in securing the work site immediately adjacent to or around private property.

- Request additional personnel, materials, supplies or equipment, as necessary that will expedite containment and minimize the impact of the overflow.

- Determine the cause of the overflow, e.g. sewer line blockage, sewer line break, lift station mechanical or electrical failure, or inadequate capacity, etc.

- Identify and request, if necessary, assistance or additional resources to correct the overflow or to assist in the determination of its cause.

- Determine if private property has been impacted. If private property is affected, notify the property owner, resident or business by direct contact. If direct contact cannot be made, leave message at the residence or business to contact the Water Agency. Include property owner contact information on the Maintenance Crew Report of Spill or Stoppage form.

1) Documentation of Spill Conditions and Actions

The maintenance crew dispatched to the spill site shall complete a Maintenance Crew Report of Spill or Stoppage form to document conditions and actions taken (See Appendix A). The required information includes:

a. Name(s) of reporting party

b. Date and Time of arrival

c. Spill Report Number (Obtained from Water Desk Operator. The number should be the same Spill Number as entered on the Initial Report of Spill or Stoppage Report).

d. Exact Location of the spill

e. Type of spill or stoppage

f. Estimated volume

g. Estimated flow rate

h. Description of downstream impacts

i. Spill documentation information

j. Time spill stopped

k. Time cleanup completed and description of cleanup activities

l. Time crew left site

m. Time, name, and nature of any regulatory agency and Water Agency upper management notifications made by the maintenance crew.

n. Spill impact boundaries.

o. Cause of spill

p. Field visits from the press, officials (police, fire departments, Fish and Game, RWQCB etc.)

q. Other information as appropriate

The completed form shall be sent to the Collection System Maintenance Coordinator and to the Operations Coordinator if surface water is impacted, once spill cleanup has been completed. Either Coordinator may request the report earlier.

2) Document Damage to Private Property

The objective is to rapidly resolve the immediate cause of the overflow and contain it to avoid or minimize damage to property and the environment. The responding crew shall use discretion in providing assistance to a property owner/occupant who has sustained property damage. Responding Water Agency personnel should be aware that the Water Agency could face increased liability for any further damages caused to private property during such assistance. The responding crew should not enter private property for purposes of assessing damage unless directed otherwise by a Coordinator. Responding crews should take still photographs and video footage, if possible, of the impacted outdoor area of the sewer overflow in order to thoroughly document the nature and extent of damage. The responding crew shall forward the photographs, negatives or videotapes to the Collection System Maintenance Coordinator for filing with a copy of the Maintenance Crew Report of Spill or Stoppage, as appropriate.

Spills that enter private property but originate from Agency facilities or are caused by Agency facilities

Generally, Agency staff should not enter private property unless directed to do so by the Maintenance Coordinator for any purpose. If possible the owner or resident should also be contacted before entering private property.

Crews responding to spills should use discretion in providing assistance to a property owner/occupant who has sustained property damage as the Agency could face increased liability for any further damages caused to private property during such assistance.

Obtain permission from a Coordinator before entering private property to complete spill cleanup or assess damage. Permission should also be obtained from the property owner or resident if possible. Damage should be documented for outdoor areas. Agency staff should not enter the private property residence for cleanup or documentation.

Spills that originate from private property and are not caused by an Agency owned facility or sewer

The Agency staff should not provide assistance, spill control, or cleanup unless there is a severe and imminent danger to public health, public or private property, or water quality. For example, severe danger might be a private property spill entering a public park, or flooding a nearby private property residence. In such cases, the Agency staff should try to minimize any private property damage from the spill containment, or control actions taken.

Example:

- Sewage on lawn, no apparent damage.
- Sewage on lawn and landscaping, removed contaminated redwood bark during cleanup.

Contact with Property Owner or Resident

Whenever possible, obtain information from the owner or resident.

Name

Phone

Address

Chain of Custody

1. The person completing the form must sign and date the form, and forward it to the Maintenance Coordinator.
2. The maintenance supervisor signs and dates after review and forwards it to the Operations Coordinator.
3. Operations Coordinator signs and dates form after review.

<u>If an overflow occurs, the responding crew shall take the following measures:</u>

1) Initial Measures for Containment

- Take immediate steps to contain the overflow, e.g., block or sand bag storm drains, recover through vacuum truck, divert into downstream sanitary sewer manhole, to minimize the impact to public health or the environment.
- Determine the immediate destination of the overflow, e.g. storm drain, surface water, ground surfaces, structure, etc.
- Identify and request the necessary materials and equipment, such as sandbags, hay bales, plastic sheeting, vacuum trucks, or portable pumps and hoses, to contain or isolate the overflow, if not readily available.

2) Additional Measures Under Potentially Prolonged Overflow Conditions

In the event of a prolonged force main failure, gravity sewer line blockage or collapse, or lift station outage, the responsible Coordinator or lead worker shall determine if a portable pump-around operation to direct flows around the defective or damaged facility is needed. If needed, the Coordinator shall take the necessary steps to obtain the personnel and equipment for the pump-around operation. Personnel shall be trained in proper portable pump capacity selection and the setup of temporary suction and discharge piping to assure safe and reliable emergency operation.

During pump-around operation, the crews shall monitor the bypass pumping operation. The Operations Coordinator shall be informed of the prolonged pumped bypass situation (e.g., need for redundancy of portable pumping, periodic follow-up notification until the lift station is returned to normal operation) to address regulatory agency issues in conjunction with emergency repairs.

Other methods of control shall be utilized when appropriate, such as fluming and berming to contain flows while repairs are made.

3) Cleanup

- Sewer overflow sites including contaminated soil, stream and riverbanks, and shorelines of other types of bodies of water, shall be thoroughly cleaned after an overflow. Solids and other debris shall be flushed, swept, raked, picked-up and transported to proper disposal area. No readily identifiable residues (e.g., fecal matter, rags, papers, or plastics) shall remain.
- Where practical, the area shall be thoroughly flushed and the wash-down water shall be contained and properly disposed of. Be aware that heavy flushing could make containment of washdown water impractical or not possible.
- The overflow site shall be secured to prevent contact by the public until the site has been thoroughly cleaned. Posting, if required, shall be undertaken pursuant to Section 4 (Public Advisory Procedure).
- In restricted conditions, the overflow site shall be disinfected and deodorized following cleanup of the site. Disinfection and deodorization should be conducted only at the direction of the Sonoma County Department of Health Services, the RWQCB, or the Maintenance Coordinator. Disinfection should be restricted to overflow near public access areas such as hospitals, schools, parks, or playgrounds, and should only be used if there is no release of chemicals to surface water. The disinfectant and any washwater shall be collected and returned to the sewer or a treatment plant.
- Where sewage has resulted in ponding, the pond shall be pumped, if practical.
- Other measures as directed by the Public Health Officer.

Notification

The Regional Water Quality Control Board, California State Department of Health Services, Sonoma County Department of Health Services, California Office of Emergency Services, the California Department of Fish and Game, and the California Highway Patrol require spill notification for various spill conditions and severity. The development of the regulatory agency spill notification requirement is discussed in Section 5. In addition to required regulatory agency notification, additional notification may be warranted to advise the public, downstream water users, and other Water Agency personnel. The following spill notification procedures will be followed.

A. The Operations Coordinator shall notify the following agencies using the following guidelines:

- The North Coast Regional Water Quality Control Board:

    1. Immediate verbal notification (telephone) for any spill to surface water, and all spills exceeding 1,000 gallons.

2. Verbal (telephone) notification within 24 hours for spills between 5 and 1,000 gallons that do not enter surface water.
3. No notification required for spills less than 5 gallons unless directed otherwise by NPDES permit.

- San Francisco Bay Regional Water Quality Control Board:

  Requires immediate verbal notification (telephone) for any spill exceeding 1,000 gallons.

- The California Office of Emergency Services:

  Requires immediate verbal notification (telephone) for a spill exceeding 1,000 gallons.

- The Sonoma County Department of Health Services:

  Requires immediate verbal notification when a spill has the potential to affect public health (reaches surface water, spills on private property, spills in or near parks, schools, hospitals or other high public traffic areas).

- California Department of Fish and Game:

  Requires immediate notification for spills in any amount to surface water or storm drains leading to waterways.

- California Department of Health Services:

  Requires immediate notification to OES for spills exceeding 1,000 gallons.

- California Highway Patrol:

  Requires immediate verbal notification (telephone) of spills on state highways.

  Refer to Appendix B for contact phone numbers.

B. The Operations Coordinator shall notify the people listed on the Coordinator-Management Group list (See Appendix B Spill Notification Procedures Internal Contact Information) of a collection system spill of 5 gallons or more, a spill of any size impacting surface water, chemical release, or major discharge violation. The Operations Deputy Chief Engineer shall be responsible for notifying the General Manager/Chief Engineer and the Sonoma County Board of Supervisors.

The General Manager shall determine the need to issue a public advisory notification and shall direct the Public Information Officer to issue the public advisory notification as necessary. The Operations Coordinator or members of Supervisor-Management Group and the Public Information Officer should provide recommendations regarding the issuance of the public advisory notification to the General Manager. A list of water contractors is included in Appendix B, additional public advisory notifications may be issued through the Sonoma County Emergency Services, or the State Office of Emergency Services.

C. The Operations Coordinator shall complete a Maintenance Crew Report of Spill or Stoppage form (See Appendix A) within 24 hours of the reported spill confirmation, and submit copies to the Management Group. The Principal Engineer/Operations shall be responsible for reviewing these completed forms. The Maintenance Crew Report of Spill or Stoppage shall be submitted to the appropriate RWQCB (See Table 5-1 for RWQCB report submittal schedules and other regulatory agency report requirements). Figure 2-1 summarizes, in part, the regulatory notification and reporting requirements. Similar to overflows from collection systems, notification of a lift station spill is received from the Water Desk Operator by the Collection Systems Maintenance Coordinator who coordinates with the Mechanic Coordinator. The Mechanic Coordinator shall initiate the investigation and correction of the cause of the spill. The Collection System Maintenance Coordinator will coordinate any spill cleanup and communicate to the Operations Coordinator if the spill reached surface water or a storm drain.

Change in Lead Agency

In some sewer spills, a regulatory agency may identify itself as the lead agency. As lead agency, it will direct the actions to control, cleanup, and issue spill notification. The following shall be done when a regulatory agency takes the lead.

1) The Maintenance Coordinator shall be notified immediately.

2) The Maintenance Coordinator shall contact the lead agency to identify the Water Agency's liaison contact. In most cases, the Maintenance Coordinator will be the Water Agency's contact.

3) The Maintenance Coordinator will notify the Operations Coordinator, Management Group, other Water Agency staff, and the spill response crew that a regulatory agency has announced itself as the lead agency, and identify the Water Agency's liaison.

4) The Operations Coordinator shall notify other regulatory agencies that another agency has taken a lead role in the spill response.

Reporting

Information regarding the sewage overflow shall include the following:

- Indication of whether there was an actual observation of a sewer line overflow or lift station overflow running into surface water, or whether there was only evidence (e.g. sewage residue on the ground surface leading to the surface water) that sewage had possibly flowed to surface water, but was not actually observed.

- Indication that the sewage overflow had not reached surface water. Guidance in characterizing these overflows to include:

  a) Sewage spills to underground storm drains (with no public access) where a crew verifies, by inspection, that the entire volume is contained in an impoundment and where complete cleanup occurs, leaving no residue.

  b) Spills where observation, or on-site evidence, clearly indicates all sewage was retained on land and did not reach surface water, and where complete cleanup occurs leaving no residue.

- A determination of the start time of the sewer overflow using one of the following methods:

  a) Date and time an overflow report was received by the Water Desk Operator.

  b) Date and time of a visual observation by a Water Agency employee.

  c) Lift station flow charts and other recorded data.

- A determination of the time that the sewer overflow ceased using the following criteria: When the blockage is cleared and flow is totally contained within the sewer without further aid or Water Agency action.

  a) Visual observations of no overflowing sewage.

  b) Upon return to normal lift station operation.

- An estimate of the rate of sewer overflow or lift station overflow in gallons per minute (gpm) by direct observation of the overflow. See Appendix C for flow estimation aids.

- A determination of the volume of the sewer overflow or lift station overflow:

  a) When the rate of sewer overflow or lift station overflow is known multiply the duration by the rate of flow to determine the volume of the overflow.

b) When the rate of overflow is not known, investigate the surrounding area for evidence of ponding, obtain dimensions of ponding and calculate volume in gallons. Total volume divided by the appropriate time interval will provide a flow rate.

- Photographs of the event when possible.
- An assessment if the spill is on private property. Water Agency personnel shall not enter private property, unless directed by the Maintenance Coordinator, Operations Coordinator or other Water Agency manager for documenting the extent of the spill.

Customer Satisfaction

The Operations Coordinator or Maintenance Coordinator confirming the reported sewage overflow shall attempt to place a follow-up telephone call to the customer(s) or other parties reporting the incident. The Coordinators may delegate the responsibility to the public information officer. The public information officer should be prepared to provide information on the cause of the spill, volume and destination of the spill, repairs, cleanup measures and if any follow up is required (e.g., completion of permanent repairs or restoration, more frequent sewer line cleaning).

SECTION 3
SAMPLING OF SURFACE WATERS AFFECTED BY SEWER SPILLS

General Procedures

Water Agency Operations or Environmental Compliance staff should be deployed as soon as practicable to sample the impacts of the overflow on receiving water.

Major Spills

The RWQCB/North Coast Region and RWQCB/San Francisco Bay Region require sampling of the receiving water for any discharge of raw sewage that is in excess of 1,000 gallons for RWQCB/North Coast Region, and 10,000 gallons for RWQCB/San Francisco Bay Region, or results in water quality violations in the waters of the State. Operators or Laboratory/Environmental Compliance Services personnel are responsible for conducting the sampling if trained Maintenance personnel are not available. Grab samples shall be taken and analyzed for Fecal Coliform, Dissolved Oxygen and Ammonia Nitrogen from points safely accessible approximately one hundred yards upstream, downstream and at the location where the raw sewage enters the waterway. Sample requirements and handling are summarized in Table 3-1. Prepared sample bottles are stored at the Water Agency managed wastewater treatment plants, and at the Water Agency's laboratory at 2150 West College Avenue, Santa Rosa.

When sample results are available, the Laboratory/ Environmental Compliance Section shall send them via fax to the respective RWQCB. This data will also be provided as part of the monthly report submitted to the respective RWQCB. Copies of the sample results shall be provided to the Operations Coordinator, Principal Engineer of Operations, Public Information Office and Maintenance Coordinator.

Minor Spills

Spills to waterways that are less than 1,000 gallons in the RWQCB/North Coast Area and 10,000 gallons in the RWQCB/San Francisco Bay Area shall be classified as "minor spills". Although minor spills do not require sampling, the Water Agency attempts to sample both minor and major spills. This position is due to a concern that spill volumes are not easily quantified.

Table 3-1 Sample Requirements			
Analysis	**Sample Size**	**Preservative**	**Holding Period**
Ammonia Nitrogen (1)			
Selective Electrode NH_3-D Method 4500	200-500 ml	Store at 4° C Acidify(pH 1.5-2) with H_2SO_4	Up to 24 hours, acidify for longer storage
Titrimetric NH_3 C Method 4500	200-500 ml	Store at 4° C Acidify (pH 1.5-2) with H_2SO_4	Up to 24 hours, acidify for longer storage
Dissolved Oxygen			
Membrane Portable Meter Method 4500 O G	Measure in-situ or 250 ml sample	None	Not Applicable
Iodide Azide Modification Method 4500 O C (2)	300 ml BOD bottle with glass stopper	0.7 ml H_2SO_4 and 1 ml Sodium Azide solution	4-8 hours at collection temp.
Fecal Coliform			
Fecal Coliform Direct Test (A-1 Medium) Method 9221B, C & E	250-500 ml	Temp < 10° C	6 hours refrigerated

1. Ammonia Nitrogen samples analyzed by outside laboratory.
2. Iodide Method for dissolved oxygen should be used as a backup method if a portable oxygen meter is unavailable. Sample analysis is completed in laboratory.

Benchmark Levels

Table 3-2 provides suggested benchmark levels for surface waters. The benchmark levels provide a comparison of typical values for surface waters and values of concern. The benchmark values are provided as a general reference to compare the required sampling of surface waters impacted by a sewage spill to typical values and values of concern. The values presented in Table 3-2 are not intended for use to determine if surface waters have been adversely impacted by a sewage spill, nor to determine if the public should be advised or signs should be posted.

Table 3-2 Surface Water Benchmark Levels			
Parameter	**Units**	**Typical Values**	**Values of Concern**
Ammonia-N	mg/L	<1	>2
Dissolved Oxygen	mg/L	6-7	<5
Fecal Coliform	MPN/100 ml	20	200

Source: Linvil G. Rich, Environmental Systems Engineering, McGraw-Hill. New York, (1973).

SECTION 4

POSTING AND PUBLIC ADVISORY PROCEDURE

Introduction

This section describes the procedures that the Water Agency will follow to advise the public, including downstream water users, of sewage spills. It focuses on the procedures that the Water Agency will use to communicate with the public in both emergency and non-emergency situations. Communication related strictly to internal Water Agency coordination is not contained in this section, as it is described in detail in Section 2.

The Water Agency manages several sanitation systems. The service areas cover many rural and urban areas, including many communities with non-English speaking residents. To advise the public of sewage spills, the Water Agency will work cooperatively with various regional and state regulatory agencies. These agencies include the North Coast RWQCB, the San Francisco Bay RWQCB, Sonoma County Department of Health Services, and California State Office of Emergency Services.

Posting and Signage

The Water Agency has a history of working cooperatively with the Sonoma County Department of Health Services (County Health) to post signs at sewage spill sites. The Water Agency and County Health determine if signs are needed for sewage spills. If a sewage spill reaches surface water, the Water Agency will post signs. As required by the North Coast and San Francisco Bay RWQCBs, signs will include, at a minimum, the wording of "Raw Sewage."

To determine when and where signs will be posted, the size of the spill and the degree of public access to the area will be assessed. Following is a summary of the six-step posting decision process that the Water Agency will follow.

1. The responding crew confirms a reported spill.

2. The Operations Coordinator or Maintenance Coordinator, after talking with the responding crew, makes a decision on the Water Agency’s intent to either post or not to post depending on the degree of the public's accessibility to the area impacted by the spill. The Operations Coordinator or Maintenance Coordinator notifies the Management Group, including the Water Agency's Public Information Officer (PIO) of the decision. The Management Group may direct the Operations Coordinator to post or not to post.

3. The Operations Coordinator calls the appropriate RWQCB and Sonoma County Department of Health Services for consultation on the posting decision. If the state or local regulatory contacts are unavailable, the Coordinator provides a recorded verbal message as to the Water Agency’s intent. If state or local contacts do not confirm within 24 hours that they have received the verbal message, the Operations Coordinator will send the notification of intent via fax to the appropriate contacts.

4. The Operations Coordinator or Maintenance Coordinator advises the Principal Engineer-Operations, the Deputy Chief Engineer-Operations/Maintenance and the PIO of the final posting decision if it changes.

5. The Collection System or Maintenance Coordinator will be responsible for directing the crews on the final posting decision.

6. The Maintenance Coordinator consults with Sonoma County Department of Health Services before any signs are removed. Once signs are removed the Maintenance Coordinator notifies the PIO.

Additional Notification

The General Manager/Chief Engineer will determine the need for further public notification, in consultation with the PIO and the Deputy Chief Engineer-Operations and/or Maintenance. Circumstances under which further public notification may be considered include the following:

- When permanent repairs to address a sewage spill will take more than 24-48 hours and reduced water usage in homes and businesses would help manage the operation of the locally affected sewer or pumping station;

- When permanent repairs to address a sewage spill will take more than 24-48 hours and the public needs to be advised of repair schedules and possible traffic detours in the vicinity of the repairs and/or sewer or lift station pump-around operations;

- When permanent repairs to address a sewage spill are completed and have taken more than 24-48 hours and the Water Agency wishes to provide additional information to the public such as the circumstance(s) contributing to the cause of the spill, measures taken to repair and clean-up the affected area, time required for repairs, volume of the spill, and any continuing monitoring of surface waters, if applicable; and

- When posting of waterways and ground surfaces affected by a spill needs to be supplemented to adequately protect public health and safety (e.g., receiving waters are heavily bordered by private property or are otherwise difficult to access).

- When the Operations Coordinator, based on the size and/or duration of the spill, determines that the spill may impact drinking water quality for downstream water users.

- When required by the RWQCB or Sonoma County Department of Health Services.

In these circumstances, the PIO or designee will normally prepare the notices, which will be made available to a broadcast media for immediate release via television, radio, newspapers, internet and if appropriate, telephone. The Water Agency will provide these organizations with spill information, including the location, time, extent, status, and the Water Agency contact for additional information. In the event that downstream water users may be impacted, the Operations Coordinator will contact the Regional Board via telephone to confirm notification of the appropriate downstream water contractors.

In the event that the RWQCB or Sonoma County Department of Health Services specifically requests public notification, the Water Agency will notify the public in accordance with the specific requirements contained in the request. The PIO in coordination with the Operations Coordinator

will develop the public notification. Once approved by the General Manager, the notification will be issued to the public by the PIO. To ensure internal Water Agency coordination, the PIO will notify the Operations Coordinator and Maintenance Coordinator of the General Manager's approved notification, and also follow the Water Agency's internal press release procedures.

Emergency Notification

For situations posing an immediate threat to public safety, the Water Agency, in collaboration with Sonoma County Department of Health Services, will immediately notify the public via radio and television using the Emergency Broadcast System, in accordance with the Emergency Operations Plan and the procedures identified in Section 2 "Receipt of Information Regarding a Sewer Overflow or Pumping Station Overflow". The Emergency Broadcast System reaches a large audience, broadcasting on both local radio and television stations as well as countywide public stations. Emergency broadcasts will be made in both English and other languages, as appropriate, to make sure non-English speaking residents are notified. In addition, in the future, the Water Agency may use the automated telephone calling service provided by the Community Alert Network of the California Office of Emergency Services to notify specific residents of an emergency public health concern.

Non-Emergency Notification

In non-emergency situations, if the General Manager determines additional notification is warranted, the PIO will identify the broadcast medium that is best suited to reach potentially affected residents, including non-English speaking residents. These media include radio, television, newspapers, and the Internet.

Within Sonoma County, there are more than thirty local radio stations, one countywide public radio station, one public television station, and approximately twenty regional newspapers. The public radio station that serves Sonoma County is KRCB-FM 91.1. The regional public television station is KRCB Channel 22, although the exact channel for this station varies depending on location within the county. The three newspapers with the largest circulation are The Press Democrat (daily), Sonoma County Independent (weekly), and the Sonoma Index-Tribune (biweekly). In addition to the traditional broadcast services provided by these media, all have websites that may be used to post public notifications of spills.

To make sure that non-English speaking residents are notified, public service announcements placed on television, radio, or in the newspaper will be provided in English and other languages, as appropriate. The PIO will determine whether additional announcements need to be provided to media organizations specifically oriented to non-English speaking residents.

SECTION 5

REGULATORY AGENCY NOTIFICATION PLAN

Introduction

This section describes the procedures the Water Agency will use to notify regulatory agencies of a sewage spill. Communication related strictly to internal Water Agency coordination is not contained in this section, as it is described in detail in Section 2.

The Water Agency operates several sanitation systems, seven of which are located within the North Coast Region and two of which are located within the San Francisco Bay Region. The Water Agency will notify the North Coast and San Francisco Bay RWQCBs of sewage spills within their respective regions, in accordance with each RWQCB's specific requirements.

The North Coast RWQCB is in the process of developing standard notification requirements for sewage spills. In the absence of formal notification requirements, the Water Agency has developed interim notification guidelines in the SRNP. These guidelines are based on a review of existing reporting requirements among various state and local agencies, including other RWQCBs; meetings with other wastewater agencies within the region; and meetings with representatives of the North Coast RWQCB.

The reporting guidelines are intended to help the Water Agency determine the appropriate action necessary to meet the respective RWQCB's informational needs and may be updated in the future when the North Coast RWQCB develops standard reporting requirements. The guidelines for the North Coast sanitation systems are similar to those used by the City of Santa Rosa to notify the North Coast RWQCB of sewage spills.

Proper notification of the RWQCBs is particularly important to the Water Agency. Following is a description of the procedures that the Water Agency will employ to meet the reporting requirements of the North Coast and San Francisco Bay RWQCBs and other regulatory agencies.

Notification Procedures

As described in Section 2, after arriving at the spill site and confirming its occurrence, the spill response crew will initiate containment and clean-up procedures. Once the spill response crew determines that an immediate threat to public health and the environment is not a concern, the crew will notify the Maintenance Coordinator who will alert the Operations Coordinator of the event. The Operations Coordinator will determine whether it is necessary to immediately contact regulatory agencies via telephone or whether written notification will suffice, according to the procedures described in Section 2.

The spill response crew will complete the Maintenance Crew Report of Spill or Stoppage. A sample report is contained in Appendix A. However, in the interest of public health and environmental protection, the spill response crew will focus initially on spill containment and clean up. The report will be completed after the spill has been stopped or controlled and the site cleanup is complete. The Maintenance and Operations Coordinators will review the completed Maintenance Crew Report of Spill or Stoppage and supporting documentation as thoroughly as possible within 24 hours of the incident. It is critical that the report be as complete and accurate

as possible because it will serve as the basis for documenting the spill internally within the Water Agency and for notifying regulatory agencies, other interested agencies, and the public.

The Operations Coordinator will be responsible for verbally notifying regulatory agencies of a spill. S/He will provide each agency with his/her name, spill location, time, date, estimated volume, name of receiving water, clean-up procedures used, status of clean-up, posting recommendations and names of other regulatory agencies contacted. In addition, s/he will be available to answer other questions that the regulatory agency representative may have. Depending on the size and nature of the spill, the verbal notification may be followed by written notification.

If written notification is required, a Water Agency Operations Coordinator will complete and submit a Maintenance Crew Report of Spill or Stoppage to the regulatory agencies and other interested parties, as appropriate, within the required timeframe of the reported spill as shown in the table at the end of this section.[1] Appendix A contains a sample report. The report is designed to address the requirements of multiple state, federal, and local regulatory agencies while simultaneously meeting the Water Agency's needs. The primary purpose of the report is to formalize the reporting process and to ensure that the Water Agency submits the appropriate information. The Water Agency will also distribute a copy of the report to its PIO.

For continuing spills, the Water Agency will submit written status reports to the appropriate RWQCB every five days until the spill is corrected. To ensure the accuracy and completeness of the reports, the Operations Coordinator will sign all written notifications and correspondence. In addition, the Principal Engineer will review the reports.

The following guidelines should be used in determining what regulatory agencies are notified of a spill event. The verbal and written notification procedures are identified in Table 5-1 located at the end of this section.

<u>Spills less than 5 Gallons, Not Entering Surface Water:</u>

The Water Agency will not notify the RWQCBs of spills less than 5 gallons, which do not enter surface water. However, the Water Agency will record this information for internal use and reference.

<u>Spills not Entering Surface Water Between 5 and 1000 Gallons:</u>

The Water Agency will verbally notify the appropriate RWQCB within 24 hours. The Water Agency will provide a completed Maintenance Crew Report of Spill or Stoppage to either the North Coast or San Francisco Bay RWQCB within 30 days of the incident. The Water Agency will also notify Sonoma County Department of Health Services if the spill threatens public health; DFG if the spill reaches a storm drain or creek; and the CHP if the spill is on a state highway. Specific notification requirements are found in Table 5-1.

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[1] The required timeframe for submitting reports varies from Region to Region, if the spill reaches surface water or not, and according to the NPDES permit and Waste Discharge Requirement. Five working days is the minimum time requirement. See the table at the end of the chapter for specific time requirements.

Spills not Entering Surface Water, Exceeding 1000 gallons:

The Water Agency will report any spill exceeding 1000 gallons to the respective RWQCB. The Water Agency will provide a completed Wastewater Stoppage/Overflow Report to either the North Coast or San Francisco Bay RWQCB within the required timeframe as outlined in Table 5-1. The Water Agency will also notify:

- Sonoma County Department of Health Services if the spill threatens public health
- DHS
- OES – if spill could have reached surface water if not for the actions of Water Agency forces
- DFG if the spill reaches a storm drain or creek and
- CHP if the spill is on a state or federal highway.

Specific notification requirements are found in Table 5-1.

Spills Entering Surface Water**:**

The Water Agency will report all spills entering surface water to the North Coast or San Francisco Bay RWQCB. The Water Agency will provide a completed Maintenance Crew Report of Spill or Stoppage to either the North Coast or San Francisco Bay RWQCB within the required timeframe as outlined in Table 5-1. The Water Agency will also notify:

- Sonoma County Department of Health Services if the spill threatens public health
- DHS
- OES
- DFG
- CHP if the spill is on a state or federal highway.

Specific notification requirements are found in Table 5-1.

SECTION 6

MEDIA NOTIFICATION PROCEDURES

Introduction

Notifying the media of a spill event is particularly important if public health is potentially threatened. As described in Section 4, the Water Agency will notify the appropriate media organizations in accordance with its Emergency Operations Plan to protect public safety in the event of a sewage spill. In non-emergency situations, if the General Manager authorizes public notification, the PIO will determine how best to notify the media of sewage spills.

Notification Procedures

If a sewage spill occurs that poses an immediate threat to public health and safety, the Water Agency will notify the media. Actions taken by the spill response crew to notify the media will include the following:

- The Water Desk Operator or Maintenance Coordinator will verify the spill and report back to the Operations Coordinator with a recommendation to be relayed to the Management Group that the media be briefed on the situation. Alternatively, the Operations Coordinator or Maintenance Coordinator will directly contact a member of the Management Group.
- The contacted Management Group member shall contact the General Manager/Chief Engineer and the PIO to provide him/her with pertinent information about the spill and any directions for notification of the general public and media. Table 5-1 summarizes the PIO contact names and pertinent communication numbers. The PIO shall be the "first-line" of response to the media for any confirmed sewage spill.
- After hours and weekend sewage spills are reported to the PIO at the number(s) listed on Table 5-1. Calls received by the Water Desk Operator from the media at any time are referred to the PIO.
- Only the General Manager/Chief Engineer or his/her designee is authorized to be interviewed by the media.

All communications with the media will be handled quickly and professionally; following notification of the appropriate regulatory agencies, internal management and other downstream or potentially affected agencies in the region, when possible. Media coverage of a spill event, however, is not the only time that the Water Agency will interact with the various news media in the region. As part of its ongoing public education and outreach efforts, the Water Agency has established contact with a variety of radio stations, television stations, and newspapers in the region. This is discussed in more detail in the next section.

SECTION 7

PUBLIC EDUCATION AND OUTREACH

Introduction

As part of its ongoing public education and outreach activities, the PIO will be implementing an effort specifically targeted at increasing public awareness of the causes and consequences of sewage spills. Building on the success of the Water Agency's public education and outreach program for water resources, this effort will employ a wide variety of tools to reach individuals and groups within the Water Agency's service area.

Educating the Water Agency's customers about sewage spills will require an extensive outreach effort. As discussed previously, the sanitation systems' service areas cover a wide area. Many of the Water Agency's customers live in rural, unincorporated areas. In addition, many people in this region are Spanish-speaking. At least seven other languages are also spoken in the region.

Beyond the geographical and language obstacles, most customers have very little direct contact with the Water Agency. Property owners pay sewer fees once a year as part of their property tax bill. The bill contains a line indicating the name of one of the several sanitation districts or zones operated by the Water Agency. Property owners may make no connection between the name of the sanitation system on the bill and the Water Agency. In addition, customers that are not property owners do not receive sewer bills. Not surprisingly, many customers are probably unaware that the Water Agency owns and operates 9 county sanitation districts and zones.

Traditionally, one of the key components of public education and outreach efforts by wastewater utilities is mailing educational materials and updates directly to customers along with regular sewer bills. This targeted approach will not work effectively for the Water Agency, for the reasons described above. To reach actual customers, the Water Agency will implement an array of creative public education and outreach strategies targeted at the communities within Sonoma County where the Water Agency provides sewer service.

Media Releases

As described above in the Public Notification section, there are numerous local and regional radio stations, television stations, and newspapers within the Water Agency's service area, some of which are targeted specifically at Spanish-speaking residents. Many of these media organizations also maintain related websites focused on local and regional issues.

The PIO will identify the broadcast medium that is best suited to reach potentially affected residents. These media include radio, television, newspapers, and the internet, as described in Section 4.

To reach members of the public through radio and television, the Water Agency will develop standard public service announcements for regular broadcast, especially during the winter months when sewage spills are more likely. Regular communication with local news sources will help to establish a good relationship with the public and the media before a spill event occurs, increasing public confidence. The frequency and nature of the communication with local news sources is up to the discretion of the PIO and General Manager.

To complement the public service announcements and provide residents with more detailed information; the Water Agency will work to develop collateral materials related to sewage spills, including who to contact in the event of a spill. The materials could be used to provide basic information to local community, environmental, and business groups.

To make sure that non-English speaking residents are notified, public service announcements placed on television, radio, or in the newspaper will be provided in English and other languages, as appropriate. In addition, the Water Agency will place announcements with media organizations specifically oriented to non-English speaking residents.

Community Events

The service areas are located in scenic, agricultural regions that host many annual community events. The Water Agency will capitalize on these community events to educate the public about the Water Agency, the cause and consequences of sewage spills, ways to prevent sewage spills, and who to contact in an emergency. Major communities within the service area that host community events throughout the year include: Santa Rosa, Windsor, and Petaluma. The PIO will determine the community events that provide the best opportunities to educate customers.

School Programs

The Water Agency is currently conducting an educational program in local elementary schools to educate children about regional water resource issues, water conservation, sanitation, and pollution prevention. Specifically, the Water Agency's Public Information/ Public Education section provides information about the Water Agency to the community at large, and provides educational tours of some of the Water Agency's sanitation facilities. In addition, the Water Agency has initiated Water Awareness Campaigns in many local schools. The Water Agency is constantly reviewing and updating its curricula to ensure that it is current and in accordance with the educational frameworks for language art and science developed by the California Department of Education.

Community/Business Groups

To improve understanding of the Water Agency's role in the local community, the PIO will, when possible, take advantage of opportunities to meet with local community and business groups. There are numerous groups throughout the Water Agency's service area interested in water resources and the environment. Currently, the PIO coordinates workshops and a Speakers Bureau with interested community groups upon request and as staff is available.

SECTION 8

RESOURCE SHARING AND MUTUAL AID

The Resource Sharing and Mutual Aid section presents an assessment of the Water Agency's need to develop plans and agreements for sharing staff, equipment and materials with other regional Cities and Agencies for sewer spill response. The assessment involves the following items:

- A review of the Agency's existing mutual aid agreements
- A review of mutual aid agreements from other agencies
- An assessment of the Water Agency's staffing and equipment

These items are discussed below. Cooperative programs, such as training and public information, are also discussed in this section.

Agency Mutual Aid Agreements

The Water Agency is a participant in the Water Agency Response Network, Region II (II WARN). The California Office of Emergency Services (OES), the California Department of Water Resources, the California Department of Health Services, and the California Utilities Emergency Association fostered the development of the Water Agency Response Network to encourage the regional development of emergency mutual aid agreements between water agencies. The II WARN region encompasses 16 counties located in the Northern and Central California coast.

The II WARN agreement defines the conditions related to the requesting and lending of mutual aid among the participating agencies. Under the II WARN, an administrator maintains and distributes a list of participating agencies. The II WARN administrator also maintains and distributes a database of equipment available from the II WARN participants.

The II WARN agreement can be utilized to obtain assistance for both short-term local emergencies such as fire where critical equipment or supplies are damaged or lost, and large regional emergencies as might occur with an earthquake or storm. The II WARN definition of emergency, however, indicates greater applicability in dealing with a large regional disaster that requires the mobilization of resources that are beyond the capability of a single agency. The procedure to request and the coordination of aid under II WARN depends on the magnitude of the problem. For large regional disasters, aid may be coordinated on a county level (Sonoma County Department of Emergency Services) or on a state level (California OES). For smaller emergency aid requests, a request from one participant may be made directly to another participant for a specific type of equipment or staff with a specialized skill.

The II WARN agreement is specific to water agency mutual aid and does not address wastewater mutual aid. The development of WARN type of agreements envisioned development of mutual aid agreements in both water and wastewater treatment agencies.

While there is significant water agency participation in WARN agreements, the development and participation by wastewater treatment agencies has been limited. Currently, Mike Cameron, the

WARN Regional Administrator, indicated that a wastewater WARN program is in the development stage.

The Water Agency's participation in a wastewater WARN agreement is considered beneficial as it provides a structure for requesting and lending mutual aid, establishes reimbursement policies and procedures, and addresses liability and indemnification issues. For the Water Agency, a WARN type of agreement for spill response could help in the control of severe or persistent spills associated with wet weather, but may be of limited help in providing immediate response to a spill for the following reasons:

- Dry weather overflows are not a significant problem for the Water Agency, and the Water Agency's ability to respond to a dry weather overflow is not normally beyond the reasonable capability of the available staff
- Wet weather overflows, which can stress the Water Agency's resources, are likely to stress other nearby agencies, preventing or delaying a request for assistance
- Aid from other areas may take too long to mobilize for immediate assistance

Other Agency Mutual Aid Agreements

Montgomery Watson conducted a review of mutual aid agreements from other agencies. The review identified mutual aid agreements based on the WARN model agreements, and aid-specific types of agreements. The WARN type agreements essentially follow the state WARN model text. The aid specific agreement limits the request for aid to specific types of emergency assistance, such as providing assistance for pump station repair only, or providing aid during for a specific condition, such as during a flood. An aid-specific agreement does not necessarily follow the WARN model text, but addresses the same issues as the WARN model with respect to the procedure for requesting aid, establishing payment, and indemnification of participants. Aid specific agreements are suitable for establishing mutual aid for specific problems within small geographic area with a limited number of participants.

Other Agency Agreements

The Water Agency has agreements to obtain additional resources such as equipment or materials during emergency conditions. The agreements can be utilized for spill response. The agreements include the following "Approved Vendor List in the Agency Emergency Operations Plan - Appendix 1 Important Contacts and Phone Numbers." Supplies, equipment, materials, and services can be obtained from these vendors in emergency conditions through established procedures. The most relevant vendors with respect to sewer spill response include the following:

- Hertz-Equipment Rental
- Grainger-Supplies and Equipment
- Pace Supply-Supplies
- Bartley Pump-Pumps

- Stevenson Tractor and Supply-Equipment
- Rummonds Construction (Purofirst)-Cleaning Services
- Weco Industries-Equipment
- Miksis Services-Sewer Cleaning Services

The Water Agency may need septage pumping and hauling services to help control or cleanup sewage spills. The Water Agency has agreements with Empire Waste Management, and Redwood Sanitary Service for pump-out services. There are a number of septage haulers in the area that can also provide this service. The Water Agency may also request the use of a 187.5 KW generator from the Sonoma County Municipal Airport. Its availability is contingent upon airport emergency power needs.

Agreement Recommendations

There are two recommendations with respect to mutual aid agreements. First, the Water Agency should participate in the development of WARN for wastewater treatment and collection. Although it may have limited impact on spill response, it will establish contacts and identify available resources that can be used for various emergency conditions. Second, the Water Agency should consider entering into aid-specific agreements with another wastewater agency or City to provide spill response in the more remote Water Agency districts. This would reduce response time to spills and help minimize potential damage and spill severity.

Staffing And Equipment

The Water Agency has a wastewater collection maintenance staff of 9. A collection maintenance standby crew of two and a maintenance mechanic are on call for emergency work outside of normal working hours. The wastewater treatment operators work a single shift at all but the Sonoma Valley Sanitation District, which has two operating shifts. One wastewater treatment operator is on standby outside normal working hours.

The Water Agency has one hydro flushing vacuum truck and two vacuum trucks. The hydro flushing vacuum truck is located at the Water Agency's Service Center when not in use in other sanitation systems.

Staffing and Equipment Assessment

Staffing adequacy for spill response is evaluated with respect to the staff and equipment immediately available for response during normal and outside of normal working hours. The staff and equipment assessment identified three concerns with respect to spill response.

- Potential delays due to location of equipment and crews from the more distant sanitation systems.
- Limited response capability for spills outside of normal working hours. Number and size of emergency standby crews.

The equipment availability, especially with respect to emergency generators and pumps is adequate. The main difficulty is in mobilizing this equipment and potential distances traveled in times of emergency. Additional emergency and backup equipment such as generators and pumps could be obtained, if needed, from the Approved Vendor List or other suppliers located in the region.

Normal Working Hours

During normal working hours the number of collection system staff is adequate for spill response, and there should not be a staff response problem during dry weather. Work and equipment priority should be given to spill response. With the distances and travel times between the Water Agency managed systems, there is the potential for the response team and equipment to encounter unavoidable delays in arriving at reported spill site. The equipment and crews may respond from different areas within the Water Agency managed systems and may result in varied travel times. Because of the potential travel time delay, it is important for the Water Agency to respond with adequate resources to minimize the severity and potential damage of a sewer spill. This is especially important when responding to spills in the more distant systems. The Initial Report of Spill or Stoppage provides the Collection System Supervisor with the necessary information to assess resource requirements. For most dry weather spills, a vacuum truck and crew is adequate, as the probable cause is a sewer blockage. For a large spill, or a spill in a high traffic area, additional equipment or personnel may be required to help contain the spill, aid in the cleanup, or provide traffic control. The Collection System Coordinator must assess the spill conditions and to the best of his judgment dispatch the required crews and equipment to minimize the overall response time to a reported spill.

If delays in preferred equipment arrival are expected, the Water Agency has alternative equipment such as the vacuum or tank trucks that can be sent to the spill site to collect the sewage or transfer it to a downstream manhole until the needed equipment arrives. Alternative equipment includes the vacuum and tank trucks, and portable pumps and hoses.

Other Water Agency spill response alternatives include arranging for a local septage hauler to pump sewage from manholes, or obtaining help from a nearby agency or city. Use of these outside resources can help reduce the response time to the spill and minimize the spill volume.

During wet weather, simultaneous spills, and spills of greater magnitude than dry weather spills are likely to occur. Early planning and the setup or staging of equipment, materials and supplies in known problem areas can reduce response time and help further protect private property and prevent or minimize spills to surface waters. In addition to preparing basic spill response equipment such as the vacuum trucks, backup equipment and supplies, crews can be trained and prepared for spill response so they can be quickly dispatched to spills. Additional equipment, such as generators, pumps, sandbags or hay bales from other agencies, or suppliers should be arranged if severe conditions are expected.

Work assignments during wet weather conditions should allow rapid redirection of staff to spill locations. Work activities should not be initiated that cannot be terminated on short notice during wet weather conditions.

Outside Normal Working Hours

A standby crew of two may not be able to adequately mobilize needed resources for all conditions. A crew of two would be adequate for a small spill in a residential area. Larger spills, wet weather spills, and spills in high traffic areas may require additional resources for spill control and cleanup, or for traffic control. Increasing the standby crew to three should provide sufficient manpower to bring additional equipment and supplies, and assist in the spill control and cleanup if necessary. There are several alternatives to increasing the standby crew requirements for these conditions.

With respect to traffic control, the use of local police, sheriff, highway patrol, or local fire departments should be investigated. Such cooperative efforts with law enforcement agencies, or fire departments, would require prior coordination. One possibility in this area would be the use of off duty police or firemen, who could be called in for traffic control. Another alternative is to arrange with other agencies, cities, or vendors to provide support in the form of equipment, or staff, when the distance to the spill is great. This could be arranged through an aid specific agreement. This would help reduce the time needed to get equipment and supplies to the spill.

Cooperative Programs

Several areas were identified, which are referred to as cooperative programs, where resources of several agencies or cities can be shared to achieve a common benefit. The identified cooperative programs are listed below.

- Training
- Public Information and Outreach with Sonoma County and the City of Santa Rosa
- Equipment Inventory Sharing
- Group Purchasing

Training for spill response within the Sonoma County region would provide many benefits. A uniform approach to the response and reporting of spills could be implemented by a cooperative training program. Costs for training could be shared among the participants. The training could be extended to other areas of wastewater collection and treatment as well.

Public information and relations for wastewater collection, and treatment issues is another area for development of a cooperative program. Such a program could involve development of public information materials and conducting various public outreach activities such as disseminating information at fairs and schools or providing speakers for community organizations. Other information could be developed for the public such as water conservation practices, proper disposal of toxic materials and waste minimization practices that could benefit sewer operations by reducing the potential for spills and reduce the potential environmental damage caused by spills. The concept of equipment inventory sharing was discussed previously as an alternative approach to getting equipment to the site of a spill outside normal working hours. This could be extended to the sharing of equipment for any spill regardless of time. The benefit of such a program is the ability to get equipment to site as quickly as possible and prevent the further loss of sewage.

The final area for consideration is grouping material and equipment purchases to lower costs. Substantial opportunities exist for savings by participation in a group purchase. Purchase orders can be written to increase total quantities by including several participants. Suppliers often lower costs for large equipment when two or more units are ordered. Participating in a group purchase for large equipment purchases, such as sewer cleaning equipment, can reduce cost of the equipment when multiple units are ordered. The Water Agency has already participated with other cities on group purchases.

SECTION 9

TRAINING PROGRAM

The Training Program describes how specific training needs will be satisfied. Effective training is essential for wastewater and collection personnel to: 1) properly respond to emergency spills and perform proper notification; 2) satisfy regulatory requirements; and 3) protect the health and safety of wastewater personnel and the general public

The Water Agency will identify the key personnel to be trained for spill response. These will most likely include wastewater field personnel, public information personnel and some of the engineering and management staff. Spill response training could be done on a regional basis and include wastewater collection system operators in Sonoma County and various regulatory agencies such as North Coast Regional Water Quality Control Board, Sonoma County Department of Health Services, San Francisco Bay Regional Water Quality Control Board, and the California Department of Fish and Game.

Project Training Approach

The purpose of this training program is to efficiently deliver the information to the participants so that they completely understand their roles during an emergency spill and know the notification procedures. The training will present the information developed in the Spill Response and Notification Plan. The information will be presented using various delivery methods including presentations, visual aids, discussions, field verification, classroom verification, and demonstrations. The Wastewater Operations Coordinators, Collection System Maintenance Coordinators, wastewater operators and collection system maintenance workers, and selected Water Agency management staff involved with spill response and notification responsibilities attend initial training sessions given by Montgomery Watson. The initial training sessions have two objectives, which are to 1) provide the spill response and notification training to the wastewater operators and collection system maintenance workers, and the supervisory and management staff, and 2) present training information needed for the supervisory and management staff to conduct subsequent training sessions with the Wastewater Operations and Collection System Maintenance staff. The program information will be designed so that the Water Agency can present the training information in subsequent training sessions. Other cities and regulatory agencies may also attend the initial training sessions.

In order to assure that the participants fully understand the purpose for and requirements of the training, training objectives will be given to the participants at the start of training. These objectives will list what each participant is expected to learn during the training and to what satisfactory degree. The objectives will list prerequisite knowledge/skill required, resources (time, personnel, facilities, equipment, etc.) required, and a schedule of when and where training will occur.

Training Plan Elements

The training plan will consist of eight elements. The training plan topics and content description are presented below.

1. Spill Response Procedure Overview

Training will cover the steps and procedures undertaken from the initial report of a spill through the dispatch of crews to the spill. It will include forms and reports initiated and completed as part of the response. Internal Water Agency notification requirements will be presented. Debriefing procedures and response plan modification will be included in this training element.

2. Spill Prevention, Control and Cleanup Procedures

Methods and approaches to prevent or minimize losses to storm drains, surface waters, and to protect private property will be presented. The procedures and methods for clean up, disinfection, and odor control will be included in the training. Spill prevention measures such as grease trap inspection, sewer cleaning and inspection, and information for the public on responsible sewer use will be discussed. Various indicators of potential sewer problems such as surcharge evidence, odors, or increased silt in treatment plant headworks that could lead to sewer spills will also be presented in this training element.

3. Spill Documentation

Documentation of spill conditions and quantities will be covered in this element including identifying the cause of the spill, and follow up procedures to ensure the problem is corrected. Methods and procedures to estimate spill quantities and rates, and procedures to verify field estimates of spill quantities and rates will be presented. Use of other documentation, such as photos, video, sketches, maps, and field notes will be included in the training.

4. Sampling Procedures

Sampling, sample identification, and sample processing will be discussed in this training element. The training will include information on the types of samples, sample techniques, sample preservation requirements, and sample storage limits.

5. Regulatory Notification Procedure

The regulatory notification procedure will consist of the notification requirements for the RWQCB, State OES, Sonoma County Department of Health Services, and the California Fish and Game. The training will cover the basic notification process and will identify whom to call, when to call, what information to provide and assignments for regulatory notifications. The documentation of regulatory notifications made during the spill will also be included in the training. A contingency plan will be included to provide guidance when the basic notification cannot be completed.

6. Spill Report Completion

Training will cover reports and information submitted as part of the regulatory agency notification process. The schedule for submission, and agencies requiring reports will be presented. Internal Water Agency reports and report information will also be presented. The Spill Report Completion training will include the procedures and methods for computing spill volumes and rates will be included for documentation purposes.

7. Public Information

Coordination between the spill response crew and PIO for sewer spills will be presented in this training session. Information the spill response crew and other Water Agency personnel should provide to the public and media during a spill will be discussed, as well as crowd control at the spill site.

8. Follow Up Measures

Follow up measures training presents steps to take following a spill. Follow up measures include the steps taken to assess the cause of the spill and prevent recurrence. The measures include such items as grease trap inspection, sewer inspection, and sewer cleaning.

Tailgate Meetings

Tailgate meetings are brief meetings of 15 to 20 minute duration held periodically to review spill prevention and notification procedures with collection system maintenance crews. The objective of the tailgate meetings are to provide periodic review of the spill response and notification plan, provide new or additional knowledge regarding spills, notification or cleanup, and provide any revised or updated spill response and notification plan revisions. Each tailgate session will address a specific topic in the spill prevention and notification plan. Six tailgate session topics will address:

- Spill Prevention and Cleanup
- Spill Documentation
- Sampling
- Assessing the Cause of Spills
- Dealing with the Public
- Public Notification and Follow Up Measures

Training Table

Instructor	Training	Audience	Page	Reference
Operations Coordinator	Initial Report of Spill or Stoppage	Operators		Sec. 2-1 to 2-3
Operations Coordinator	Dispatch of Maintenance Crew	Operators		Sec. 2-4 to 2-5
Operations Coordinator	Internal Supervisory and Management Notification	Operators		Figure 2-1
Operations Coordinator	Regulatory Agency Notification	Operators		Figure 2-1, Sec. 2-10 to 2-11; 5-4 to 5-7
Operations/Lab Coordinator	Sampling	Operators, Chemists, Environmental Compliance Inspectors, Maintenance Workers		Section 3
Mechanic Coordinator	Lift Station Failure/Spill	Mechanics, Maintenance, Operators		Sec. 2-6 & 2-7
Maintenance Coordinator	Overflow Responding Crew Procedure	Maintenance, Operators		Sec. 2-6 & 2-10
Maintenance Coordinator	Estimating Flow Rate and Spill Volume	Maintenance, Operators, Mechanic, Environmental Compliance		Appendix 3
Maintenance Coordinator	Spills Onto or Originating from Private Property	Maintenance, Operators		2-9 to 2-10
Maintenance Coordinator, Public Information Officer	Public Notification/ Signage	Maintenance, Operators, Public Info. Personnel		Section 4
Operations Coordinator	Spill Documentation and Reporting	Maintenance, Operators, Management		Sec. 2-7 to 2-8
Maintenance Coordinator, Public Information Officer	Dealing With Public	Operations, Maintenance, Management		Sec. 2-14; 6 & 7

SECTION 10

PLAN DISTRIBUTION AND UPDATING OF SRNP

The SRNP reflects the procedures established for responding to reports of possible sewer overflows and confirmed overflows from the wastewater collection system and pumping station system so as to:

- Minimize the adverse effects of sewer overflows on public health, water quality and beneficial uses of the receiving waters.
- Minimize the sewer overflow volume that enters surface water.

Submittal And Availability Of SRNP

Copies of the SRNP and any amendments shall be distributed to the following Water Agency Groups:

- Management Group
- Operations Coordinator Group
- Maintenance Coordinator Group
- Public Information
- Other SRNP Plan holders within the Water Agency.

The makeup of these Water Agency Groups is defined in Appendix B.

All Water Agency staff directly involved with investigating and responding to spills accordingly shall receive a copy. A copy of the Spill Response and Notification Plan shall be kept at the Operations Water Desk. The master copy will be kept in the technical writer's operational library. All other Water Agency staff who may become incidentally involved in responding to collection system and pumping station overflows shall be generally familiar with the contents of the SRNP.

In addition to the SRNP, the Water Agency's Emergency Operations Plan will contain the spill response and notification information.

- Overflow Response Procedure
- Surface Water Sampling
- Public Advisory Procedure
- Regulatory Notification
- Media Notification Procedures
- Resource Sharing and Mutual Aid

Review And Update Of SRNP

The SRNP shall be reviewed and amended as appropriate. The O&M Technical Writing group will make all revisions. That group will be responsible for distributing plan changes to SRNP holders. The Water Agency will:

- Conduct a debriefing session of the spill response team supervisory staff and PIO after each major spill event to evaluate the effectiveness of the response, identify areas of improvement, and develop SRNP revisions, as necessary.
- Conduct five-year review of the SRNP and update it with the issuance of a revised or new NPDES permit, or regulatory agency spill response requirements.
- Conduct annual training on the use of the SRNP with new Water Agency personnel.
- Review and update annually the various contact lists and telephone and FAX numbers included in the SRNP or the Appendices of the Emergency Operations Plan for response personnel, regulatory agencies, mutual aid resources, and public media.

Spill Event Debriefing

Following a major sewer spill, a debriefing will be completed. A Water Agency Water/Wastewater Operations Coordinator will be responsible for conducting the debriefing. The debriefing should evaluate both the reports and forms completed and the interviews with Water Agency staff involved in the spill response, including Operations and Maintenance Coordinators, the response crew, and Public Information Officer. The purpose of the debriefing is to assess the effectiveness of the SRNP and Water Agency response to the spill event. The debriefing will include recommendations and a schedule to correct or improve identified spill response deficiencies. A debriefing form is included in Appendix D.

The spill event debriefing addresses the following spill response activities:

- Assess spill response procedures from receiving a spill report through the dispatch and arrival of a properly prepared response team to the spill site.
- Assess spill control, cleanup and documentation adequacy.
- Assess adequacy and compliance with regulatory spill notification and report submittals.
- Assess adequacy of public information activities and compliance with Water Agency public information policies and procedures.

Review of Procedures and Preparedness

The Water Agency should provide once per year training in preparedness and responsiveness associated with sewer and pumping station overflows will be provided to its operations and maintenance crewmembers, and management and supervisory staff. The SRNP will be used as the training guide. The session will focus on:

- Defining the goals and purpose of the SRNP
- Review of Overflow Response Procedure
- Monitoring/Sampling of Surface Waters
- Public Advisory Procedure
- Regulatory Notification Procedure
- Media Notification Procedures
- SRNP updates and revisions

For at least one training session, agencies from throughout the region will be invited to participate. Pursuant to RWQCB request, we invited the following agencies to participate in plan development during 1999 and 2000:

- City of Ukiah
- City of Santa Rosa
- City of Healdsburg
- City of Petaluma
- Town of Windsor
- City of Cloverdale
- City of Rohnert Park
- Sonoma County Department of Emergency Services
- North Coast Regional Water Quality Control Board
- San Francisco Bay Regional Water Quality Control Board
- Sonoma County Department of Health
- California Department of Fish and Game

Water Agency staff will be provided with a printed weatherproof summary overview of the SRNP providing crews a reminder of key actions in responding to a sewage overflow and essential telephone numbers. Other aids to assist crews in estimating overflow volumes and flow rates shall be provided. Copies of the summary overview, telephone numbers, and overflow estimating aids are included in the SRNP appendices.