

CITY OF SACO

SEWER OVERFLOW RESPONSE PLAN

I. AUTHORITY

A. (Site specific permits, codes, ordinances.)

The City of Saco operates its publicly owned treatment works (POTW) under a license from the USEPA and State of Maine under NPDES Permit #ME01-01117. This license was issued in 1996 and is scheduled to expire in the year 2001.

The City of Saco has a master plan for combined sewer overflows which was adopted in 1995.

Within the City of Saco, the pump stations and force mains are operated and maintained by the Wastewater Treatment Staff. Sewers are operated and maintained by the Public Works Department. Local codes and ordinances of the City of Saco include:

Chapter 176 - Sewers

II. GENERAL

The Sewer Overflow Response Plan (SORP) is designed to ensure that every report of a confirmed sewage overflow is immediately dispatched to the appropriate crews so that the effects of the overflow can be minimized with respect to impacts to public health and adverse effects on beneficial uses and water quality of surface waters and customer service. The SORP further includes provisions to ensure safety pursuant to the directions provided by the CSO Master Plan and Department of Public Works Confirmed Space Entry training and that notification and reporting is made to the appropriate local, state and federal authorities. For purposes of this SORP, "confirmed sewage spill" is also sometimes referred to as "sewer overflow," "overflow," or "SO." The effective date of this plan is 03-31-00.

A. Objectives

The primary objectives of the SORP are to protect public health and the environment, satisfy regulatory agencies, waste discharge, and master plan permit conditions and action plan which address procedures for managing sewer overflows, and minimize risk of enforcement actions against the City of Saco.

Additional objectives of the SORP are as follows:

- Provide appropriate customer service;
- Protect collection system personnel and wastewater treatment plant;
- Protect the collection system, wastewater treatment facilities, and all appurtenances; and
- Protect private and public property beyond the collection and treatment facilities.

This plan shall not supersede existing emergency plans or standard operating procedures (SOPs) unless directed by the Director of Public Works or Director of Waste Treatment Facilities.

B. Organization of Plan

The key elements of the SORP are addressed individually as follows:

Section III	Overflow Response Procedure
Section IV	Public Advisory Procedure
Section V	Regulatory Agency Notification Procedure
Section VI	Media Notification Procedure
Section VII	Distribution and Maintenance of SORP

C. SO Tracking

A procedure to track the frequency and location of SOs has been prepared under separate cover. Refer to the Combined Sewer Overflow Master Plan. Each manhole in the City has a numeric identification which should be used to reference and report all information. Depending on the completeness of information resulting from implementation of the procedure, it could support Director of Public Works or the delegated representative's decision process for directing the correction of overflows and prioritizing maintenance activities.

III. OVERFLOW RESPONSE PROCEDURE

The Overflow Response Procedure presents a strategy for the City of Saco to mobilize labor, materials, tools and equipment to correct or repair any condition, which may cause or contribute to an unpermitted discharge. The plan considers a wide range of potential system failures that could create an overflow to surface waters, land or buildings.

A. Receipt of Information Regarding an SO

An overflow may be detected by system employees or by others. The Department of Public Works is primarily responsible for receiving phone calls from the public of possible sewer overflows from the collection system, and for issuing work orders.

Generally, telephone calls from the public reporting possible sewer overflows are received during the day by telephone at the Department of Public Works. The after hours emergency phone line is staffed 24 hours per day by the Public Safety Dispatch Center at 284-4535. The sewer system operator has a program for educating the public to report overflows they observe and the phone number to be called.

1. The telephone operator obtains all relevant information available regarding the overflow including:
 - a. Time and date call was received;
 - b. Specific location;
 - c. Description of problem;
 - d. Time possible overflow was noticed by the caller;
 - e. Caller's name and phone number;
 - f. Observations of the caller (e.g., odor, duration, back or front of property);and
 - g. Other relevant information that will enable the responding investigator and crews, if required, to quickly locate, assess and stop the overflow.

The receiver then records the overflow information and creates a work order for assignment to Department of Public Works. This work order should reference the specific manhole number.

2. Pump station failures are monitored and received by Treatment Plant Superintendent, Mike Bolduc at the Wastewater Treatment Plant. The operator on duty immediately conveys all information regarding alarms to Treatment Plant Superintendent to initiate the investigation.

3. Sewer overflows detected by any personnel in the course of their normal duties are reported immediately to the Department of Public Works. Dispatching personnel record all relevant overflow information and dispatch a sewer investigator and additional response crews, as needed.
4. A sewer investigator confirms the overflow. Until verified, the report of a possible spill will not be referred to as a “sewer overflow.”

Department of Public Works completes an Overflow Report form (See Figure III-2) within 24 hours of the sewer investigator’s confirmation. The Director of Public Works is responsible for reviewing, updating and signing the final Overflow Report. Table III-2 summarizes the SO response tracking protocol.

B. Dispatch of Appropriate Crews to Site of Sewer Overflow

Failure of any element within the wastewater collection system that threatens to cause or causes a SO triggers an immediate response to isolate and correct the problem. Crews and equipment are available to respond to any SO locations. Dispatch crews to any site of a reported SO immediately. Also, place additional maintenance personnel “on call” in the event extra crews are needed. Figure III-1 summarizes the Sewer Overflow Action Plan.

1. Dispatching Crews

- Dispatchers receive notification of sewer overflows as outlined in Section A “Receipt of Information Regarding a SO” and dispatch a sewer investigator and/or the appropriate crews and resources as required.
- Dispatchers notify the appropriate manager or supervisor, with quickest communication tool available, regarding sewer overflows and field crew locations.

2. Crew Instructions and Work Orders

- Dispatch responding crews via quickest communication tool available. Department of Public Works employees receive instructions from sewer investigators or their supervisors regarding appropriate crews, materials, supplies, and equipment needed.
- Dispatchers verify that the entire message has been received and acknowledged by the crews who were dispatched. Follow all standard communications procedures. All employees being dispatched to the site of an SO proceed immediately to the site of the overflow. Report any delays or conflicts in assignments immediately to the supervisor for resolution.

- In all cases response crews report their findings, including possible damage to private and public property, to the Director of Public Works immediately upon making their investigation. If Director of Public Works has not received findings from the field crew within one (1) hour the Director of Public Works contacts the response crew to determine the status of the investigation.
- If necessary, site supervisor refers all pertinent information to the next shift, including any details of the problems described by customers.

3. Additional Resources

- Site supervisor receives and conveys to appropriate parties requests for additional personnel, material, supplies, and equipment from crews working at the site of a sewer overflow.

4. Preliminary Assessment of Damage to Private and Public Property

- The focus is to resolve the problem. The response crews use discretion in assisting the property owner/occupant as reasonably as they can. Be aware that the Department of Public Works could face increased liability for any further damages inflicted to private property during such assistance. The response crew shall not enter private property for purposes of assessing damage. Take appropriate still photographs and video footage, if possible, of the outdoor area of the sewer overflow and impacted area in order to thoroughly document the nature and extent of impacts. Forward available photographs to the Department of Public Works for filing with the Overflow Report.

5. Field Supervision and Inspection

- The supervisor of the sewer investigator who confirmed the sewer overflow, visits the site of the overflow, if possible, to ensure that provisions of this overflow response plan and other directives are met.
- The supervisor of the sewer investigator is responsible for confirming that the Overflow Report is provided to Department of Public Works within the specified time.

6. Coordination with Hazardous Material Response

- Upon arrival at the scene of a sewer overflow, should a suspicious substance (e.g., oil sheen, foamy residue) be found on the ground surface, or should a suspicious odor (e.g., gasoline) not common to the sewer system be detected, the sewer investigator or response crew immediately contacts the supervisor for guidance before taking further action.

- Should the supervisor determine the need to alert the hazardous material response team, the sewer investigator or crew awaits the arrival of the appropriate response team to take over the scene. **Remember that any vehicle engine, portable pump or open flame (e.g., cigarette lighter) can provide the ignition for an explosion or fire should flammable fluids or vapors be present. Keep a safe distance and observe caution until assistance arrives.**
- Upon arrival of the response team, the sewer investigator or crew takes direction from the person with the lead authority of that team. Only when that authority determines it is safe and appropriate for the sewer investigator and crew to proceed can they then proceed under the SORP with the containment, clean-up activities and correction.

See Appendix D for additional guidance. Minimum requirements for hazardous materials awareness training of wastewater collection and conveyance system personnel should be reviewed and identified training appropriately administered.

C. Overflow Correction, Containment, and Clean-Up

Sewer Overflows (SO) of various volumes occur from time to time in spite of concerted prevention efforts. Spills may result from blocked sewers, pipe failures, or mechanical malfunctions among other natural or man-made causes. The City of Saco is constantly on alert and ready to respond upon notification and confirmation of an overflow.

This section describes specific actions to be performed by the crews during an SO.

The objectives of these actions are:

- To protect public health, environment and property from sewage overflows and restore surrounding area back to normal as soon as possible;
- To establish perimeters and control zones with appropriate traffic cones and barricades, vehicles or use of natural topography (e.g., hills, berms);
- To promptly notify the regulatory agency's communication center of preliminary overflow information and potential impacts;
- To contain the sewer overflow to the maximum extent possible including preventing the discharge of sewage into surface waters; and
- To minimize the City of Saco's exposure to any regulatory agency penalties and fines.

Under most circumstances, the City of Saco handles all response actions with its own maintenance forces. They have 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 a problem elsewhere in the system. For example, repair of a force main could require the temporary shutdown of the pump station and diversion of the flow at an upstream location. If the closure is not handled properly, sewage system backups may create other overflows.

Circumstances may arise when the City of Saco could benefit from the support of private-sector construction assistance. This may be true in the case of large diameter pipes buried to depths requiring sheet piling and dewatering should excavation be required. The City of Saco may also choose to use private contractors for open excavation operations that might exceed one day to complete.

1. Responsibilities of Response Crew Upon Arrival

It is the responsibility of the first personnel who arrive at the site of a sewer overflow to protect the health and safety of the public by mitigating the impact of the overflow to the extent possible. Should the overflow not be the responsibility of City of Saco but there is imminent danger to public health, public or private property, or to the quality of waters of the U. S., then the City of Saco takes prudent emergency action until the responsible party assumes responsibility and provides actions. Upon arrival at an SO, the response crew:

- Determines the cause of the overflow, e.g. sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.;
- Identifies and requests, if necessary, assistance or additional resources to correct the overflow or to assist in the determine of its cause;
- Determines if private property is impacted. If yes, inform the dispatcher so the Health Office – Dr. Connor Moore (Work – 282-7531, Home – 282-1976) may be advised. Assistant Health Officer Richard Lambert (Work – 282-3487, Home 282-2628).
- Take appropriate measures to perfect the health and safety of affected public and property.
- Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operates pump station controls, repairs 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); and
- Requests additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.

2. Initial Measures for Containment

Initiate measures to contain the overflowing sewage and recover where possible sewage, which has already been discharged, minimizing impact to public health or the environment.

- Determine the immediate destination of the overflow, e.g. storm drain, street curb gutter, body of water, creek bed, etc.;
- Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available; and
- Take immediate steps to contain the overflow, e.g., block or bag storm drains, recover through vacuum truck, divert into downstream manhole, etc.

3. Additional Measures Under Potentially Prolonged Overflow Conditions

In the event of a prolonged sewer line blockage or a sewer line collapse, set up a portable by-pass pumping operation around the obstruction.

- Take appropriate measures to determine the proper size and number of pumps required to effectively handle the sewage flow.
- Implement continuous or periodic monitoring of the by-pass pumping operation as required.
- Address regulatory agency issues in conjunction with emergency repairs.

4. Cleanup

Clean sewer overflow sites thoroughly after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastics, and rubber products) is to remain.

- Where practical, thoroughly flush the area and clean of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked-up, and transported for proper disposal.
- Secure the overflow to prevent contact by members of the public until the site has been thoroughly cleaned. If posting is required, refer to Section IV.
- Where appropriate, disinfect and deodorize the overflow site.
- Where sewage has resulted in ponding, pump the pond dry and dispose of the residue in accordance with applicable regulations and policies.

- If a ponded area contains sewage which cannot be pumped dry, it may be treated with bleach. If sewage has discharged into a body of water that may contain fish or other aquatic life, do not use bleach or other appropriate disinfectant and contact the MeDEP Overboard Licensing and Enforcement (207) 822-6300 for specific instructions.
- Use of portable aerators may be required where complete recovery of sewage is not practical and where severe oxygen depletion in existing surface water is expected.

See Appendix F for further guidance on use of disinfectants.

D. Overflow Report

The Director of Public Works or designee completes an Overflow Report (See Figure III-2). The Director of Public Works or designee promptly notifies appropriate department and agencies when the overflow is eliminated. Information regarding the sewer overflow includes the following:

- Indication that the sewage overflow had reached surface waters, i.e., all overflows where sewage was observed running to surface waters, or there was obvious indication (e.g. sewage residue) that sewage flowed to surface waters; and
- Indication that the sewage overflow had not reached surface waters. Guidance in characterizing these overflows to include:
 - a. Sewage overflows to covered storm drains (with no public access) where personnel verify, by inspection, that the entire volume is contained in a sump or impoundment and where complete clean-up occurs leaving no residue.
 - b. Preplanned or emergency maintenance jobs involving bypass pumping if access by the public to a bypass channel is restricted and subsequent complete clean-up occurs leaving no residue (Any preplanned bypass under these circumstances will not be considered an overflow unless done without authorization by the Director of Public Works.); and
 - c. Overflows where observation or on-site evidence clearly indicates all sewage was retained on land and did not reach a surface water and where complete cleanup occurs leaving no residue.

- Determination of the start time of the sewer overflow by one of the following methods:
 - a. Date and time information received and/or reported to have begun and later substantiated by a sewer investigator or response crew;
 - b. Visual observation; or
 - c. Pump station and lift station flow charts and other recorded data. At major pump stations this information is available from the Treatment Plant SCADA System.
- Determination of the stop time of the sewer overflow by one of the following methods:
 - a. When the blockage is cleared or flow is controlled or contained; or
 - b. The arrival time of the sewer investigator or response crew, if the overflow stopped between the time it was reported and the time of arrival.
- Visual observations

An estimation of the rate of sewer overflow in gallons per minute (GPM) by one of the following criteria:

 - a. Direct observations of the overflow; or
 - b. Measurement of actual overflow from the sewer main.
- Determination of the volume of the sewer overflow:
 - a. When the rate of overflow is known, multiply the duration of the overflow by the overflow rate; or
 - b. When the rate of overflow is not known, investigate the surrounding area for evidence of ponding or other indications of overflow volume.
- Photographs of the event, when possible.
- Assessment of any damage to the exterior areas of public/private property. Personnel shall not enter private property for purposes of estimating damage to structures, floor and wall coverings, and personal property.

See Appendix E for guidance on estimating sewer overflow volumes and flow rates.

E. Customer Satisfaction

The supervisor, sewer investigator, or response crew confirming the overflow follows up in person or by telephone with the citizen(s) reporting the overflow. The cause of the overflow and its resolution will be disclosed.

IV. PUBLIC ADVISORY PROCEDURE

This section describes the actions the City of Saco takes, in cooperation with the Director of Public Works to limit public access to areas potentially impacted by unpermitted discharges of pollutants to surface water bodies from the wastewater collection system.

A. Temporary Signage

The City of Saco has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.

Table III-3 outlines the decision process for personnel to recommend to the Director of Public Works that posting of a confirmed overflow be undertaken or that there is reasonable potential for an overflow to occur thus the need to post in advance. If posting is deemed necessary, the Health Officer – Dr. Connor Moore shall be notified.

B. Other Public Notification

Should the posting of surface water bodies or ground surfaces subjected to a sewer overflow be deemed necessary by the Director of Public Works he/she also determines the need for further public notification through the use of pre-scripted notices made available to the printed or electronic news media for immediate publication or airing, or by other measures (e.g., front door hangers).

The Guidebook user should consult with the municipality's public information officer or equivalent with regard to press releases and the distribution of other information to the public. See Appendix H for examples of pre-scripted notices and other notification and posting procedures of two large U.S. municipalities.

V. REGULATORY AGENCY NOTIFICATION PLAN

The Regulatory Agency Notification Plan establishes procedures which the City of Saco follows to provide formal notice to the City of Saco, MeDEP and EPA as necessary in the event of SOs. The reporting criterion below explains to whom various forms of notification should be made, and lists agencies/individuals to be contacted.

Agency notifications will be performed in parallel with other internal notifications. The procedures for providing notification to the media of an SO is presented in Section VI - Media Notification Procedure. Internal notification and mobilization of personnel are detailed in Section III - Overflow Response Procedure.

Using data supplied during the verification process and updates from the response crew, the Director of Public Works or designee prepares initial and final Overflow Reports. Make this report available to those desiring additional information or written confirmation.

Prepare written notification in a “hard copy” version within 4 working days. The Director of Public Works or designee is responsible for meeting the 24-hour oral or fax notification requirement. The Department of Public Works prepares written notification to the appropriate regulatory agencies and others of any confirmed overflows. The Director of Public Works or designee signs these notifications.

A. Immediate Notification

The City of Saco notifies federal and state agency representatives (see below) immediately and keeps them abreast of response actions and final corrective actions.

Notify these primary agencies orally or by fax no later than 8 hours, preferably within 4 hours, after an overflow is confirmed. Fax the initial and any updated Overflow Report to:

MeDEP, Bureau of Local and Water Quality (South Portland Office), City of Saco, and DeLuca-Hoffman Associates, Inc.

B. Secondary Notification

After those parties identified in Section A. Immediate Notification have been contacted, Director of Public Works or designee contacts other agencies, as necessary, as well as other interested and possibly impacted parties.

City Administrator – Richard Michaud
Superintendent, Wastewater Treatment Plant – Michael Bolduc

VI. MEDIA NOTIFICATION PROCEDURE

When an overflow has been confirmed and is a threat to public health, take the following actions, if necessary, to notify the media:

- A. Sewer investigator or response crew verifies overflow and reports back to the Director of Public Works.
- B. The Director of Public Works or designee informs the Public Information Office which is the City Administrator. Table III-4 provides the PIO contact names and numbers. The PIO shall be the "first-line" of response to the media for any overflow.
- C. After hours and weekend sewer overflows are reported to the PIO at the number(s) listed on Table III-4.
- D. Calls received by the dispatcher from the media at any time are referred to the PIO.
- E. The following personnel are authorized to be interviewed by the media and are the designated spokespersons:

City Administrator – Richard Michaud
Director of Public Works – Larry Nadeau

Table III-4

Public Information Office

Contact Name	Office	Work	Home
(Primary)	Public Works	284-6641	282-5836
(Backup #1)	Dr. Connor Moore	282-7531	282-1976
(Backup #2)	Richard Lambert	282-3487	282-2628

This suggested media relations guide which should be adapted accordingly. All federal, state and local statutes for publicly noticing sewer overflows should be reflected in the Guidebook user's plan.

VII. DISTRIBUTION AND MAINTENANCE OF SORP

Annual updates to the SORP reflect all changes in policies and procedures as may be required to achieve its objectives.

A. Submittal and Availability of SORP

Distribute copies of the SORP and any amendments to the following departments and functional positions:

Department of Public Works, 300 Main Street, Saco, Maine
Wasterwater Treatment Plant, 300 Main Street, Saco, Maine
Fire Department, 300 Main Street, Saco, Maine
Code Enforcement, 300 Main Street, Saco, Maine
City Administrator, 300 Main Street, Saco, Maine

Familiarize all other personnel who may become incidentally involved in responding to overflows with the SORP.

B. Review and Update of SORP

Review the SORP annually and amend as appropriate. City of Saco should:

- Update the SORP with the issuance of a revised or new NPDES permit or state waste discharge permit;
- Conduct annual training sessions with appropriate personnel; and
- Review and update, as needed, the various contact person lists included in the SORP.

C. Practical Resources

The author of a SORP should consider preparing and identifying here such things as the availability of weather-proof overview of the SORP which could fit in a shirt pocket or be kept in a vehicle glove box (i.e., a laminated “pocket guide”), vehicle dashboard stickers providing crews a reminder of key actions in responding to a sewer overflow and essential telephone numbers (e.g., public information officer name and telephone number), and other printed materials for distribution to personnel such as handy quick references for estimating sewer overflow volumes and flow rates. The conducting of periodic workshops with managers, supervisors and other key personnel to review established response activities, and suggestions for new or revised procedures should be considered and recognized here.

D. Training

The author of a SORP should consider summarizing here the availability of relevant training programs, reading materials and videocassette tapes that could assist response crews in executing their duties and responsibilities in confirming overflows, identifying their causes, and resolving them. Periodic field drills of the overflow response procedures should be addressed. Such drills could be executed in conjunction with other periodic emergency preparedness drills associated with man-made (e.g., fires, explosions) and natural disasters (e.g., flooding, severe weather).