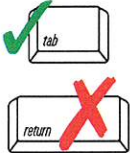


Massachusetts Department of Environmental Protection
Bureau of Water Resources – Wastewater Management Program
Sanitary Sewer Overflow Public Notification Plan

1. Facility Information

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Town of Millis - DPW

Name of Permittee (Facility or System)

James F. McKay

Permittee Contact Name

900 Main Street

Permittee Mailing Address

jmckay@millisma.gov

Email Address

508-376-5424

Phone Number

NPDES Permit # (only for system with a wastewater treatment plant)

System contains (check all that apply):

☒ Collection system

☒ Pump station(s)

☐ Wastewater treatment plant

Location of WWTP discharge, if applicable:

Please attach a map with locations of discharges and affected waterbodies.

2. Identification of Environmental Justice Populations

Are there Environmental Justice (EJ) populations that would potentially be affected by your wastewater treatment plant discharge(s) or a sanitary sewer overflow?

☐ Yes

☒ No

If there are EJ populations that would potentially be affected, do 25% or more of households lack English-language proficiency, and at least 5% of the population has speakers who self-identify as "do not speak English very well"?

☐ Yes

☒ No

Provide a list of all languages that notifications will be translated into:

English

Does your municipality provide translation of municipal documents in the languages listed above?

☐ Yes

☒ No

If you answered "yes" above, does your municipality's staff provide translation of municipal documents, or are translation services outsourced?

☐ Municipal Staff ☐ Outsourced

3. Discharges, Overflows, and Public Notification Content

When public notification is required: (check box to affirm)

☒ Permittee is aware that all events covered under 314 CMR 16.03(1)(b-e) require issuance of a public advisory notification.

Required content of public notification: (check box to affirm)

☒ Permittee is aware of all required information for public advisory notifications under 314 CMR 16.04(10)

Permittee can meet all requirements of 314 CMR 16.04(10)

☒ Yes

☐ No

If no, please describe in detail which components the permittee is not able to meet, and the measures needed to comply. Include a schedule for compliance.

Components that cannot be met

Schedule for compliance (attach schedule)

Massachusetts Department of Environmental Protection
Bureau of Water Resources – Wastewater Management Program
Sanitary Sewer Overflow Public Notification Plan

4. Required Timeline for Notification

Discovery of a Discharge or Overflow:

Permittee can discover an event under 314 CMR 16.04(5)(b) & (c) within the required timeline? ☒ Yes ☐ No

If no, specify limitations to meeting these requirements and potential remedies:

Issuance of Public Notification:

Permittee can meet the notification requirements in 314 CMR 16.04(4) ☐ Yes ☒ No

If no, why and what measures are needed for compliance?

See attached.

Continuation of Public Notification:

Permittee can meet the notification requirements in 314 CMR 16.04(7) ☐ Yes ☒ No

If no, which requirement cannot be met and what measures are needed for compliance?

See attached.

Cessation of Public Notification:

Permittee can meet the notification requirements in 314 CMR 16.04(8) ☐ Yes ☒ No

If no, why, and what measures are needed for compliance?

See attached.

Retraction of Public Notification:

Permittee can meet the notification requirements in 314 CMR 16.04(9) ☒ Yes ☐ No

If no, which requirement cannot be met and what measures are needed for compliance?

5. Website, Subscriber-Based System, and Recipients

Provide the URL for the website where you will post public notifications:

<https://www.millisma.gov/node/971/news>

Attach description for the subscriber-based system where the public can sign up to receive notifications.

The Town of Millis has the ability of notifying residence of an SSO by going the the Town website and follow the directions under the link subscribe.

Massachusetts Department of Environmental Protection
Bureau of Water Resources – Wastewater Management Program
Sanitary Sewer Overflow Public Notification Plan

5. Website, Subscriber-Based System, and Recipients (Cont.)

Provide link where the public can subscribe for notifications (if different than the website listed above).

millisma.gov/subscribe

List the two media outlets serving the area near the discharge or outfall that the permittee will contact to provide a public notification. Include name of organization, name of contact, and contact's email address or fax number.

Millis Community Media mysuna@millismedia.deskpilot.com 508-906-3730

Media Outlet #1

Metrowest News 508-626-3800

Media Outlet #2

Does one of these media outlets serve the EJ population?

☐ Yes ☐ No

If no, then provide at least one additional news organization that primarily serves the EJ population(s) within the impacted municipalities. Include name of organization, name of contact, and contact's email address or fax number.

See Instructions for list of **Required Public Notification Recipients** (314 CMR 16.04(4)(a)). Please attach list of your required contacts.

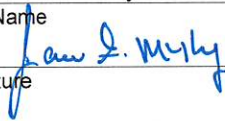
Certification

I attest that I have examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certifying statement. The information contained in this submittal is, to the best of my knowledge, true, accurate, and complete. I am fully authorized to make this attestation on behalf of the facility.

James F. McKay

Print Name

Signature



Director of Public Works

Title

Date

6/15/2022

TOWN OF MILLIS



DEPARTMENT OF PUBLIC WORKS

Veterans Memorial Building
900 Main Street
Millis, Massachusetts 02054

Milli's procedure for discovering SSO discharge and overflows are:

- Town staff in the Water and Sewer Department receive alerts through our current work order system from any residents that notice SSOs, and Water and Sewer Staff identify SSOs during their filed investigation during heavy rains.
- Water and Sewer Department staff are mobilized as soon as the alert is received to identify the cause of the overflow, estimate the volume of discharge, and treat and contain the discharge. An email will be sent to the DPW Superintendent no more than four (4) hours after the alert received.
- The email and text to the DPW Superintendent will constitute the time initial of discovery.
- After the SSO is discovered, the Town will take no more than two (2) hours to send the initial public advisory notification via email.

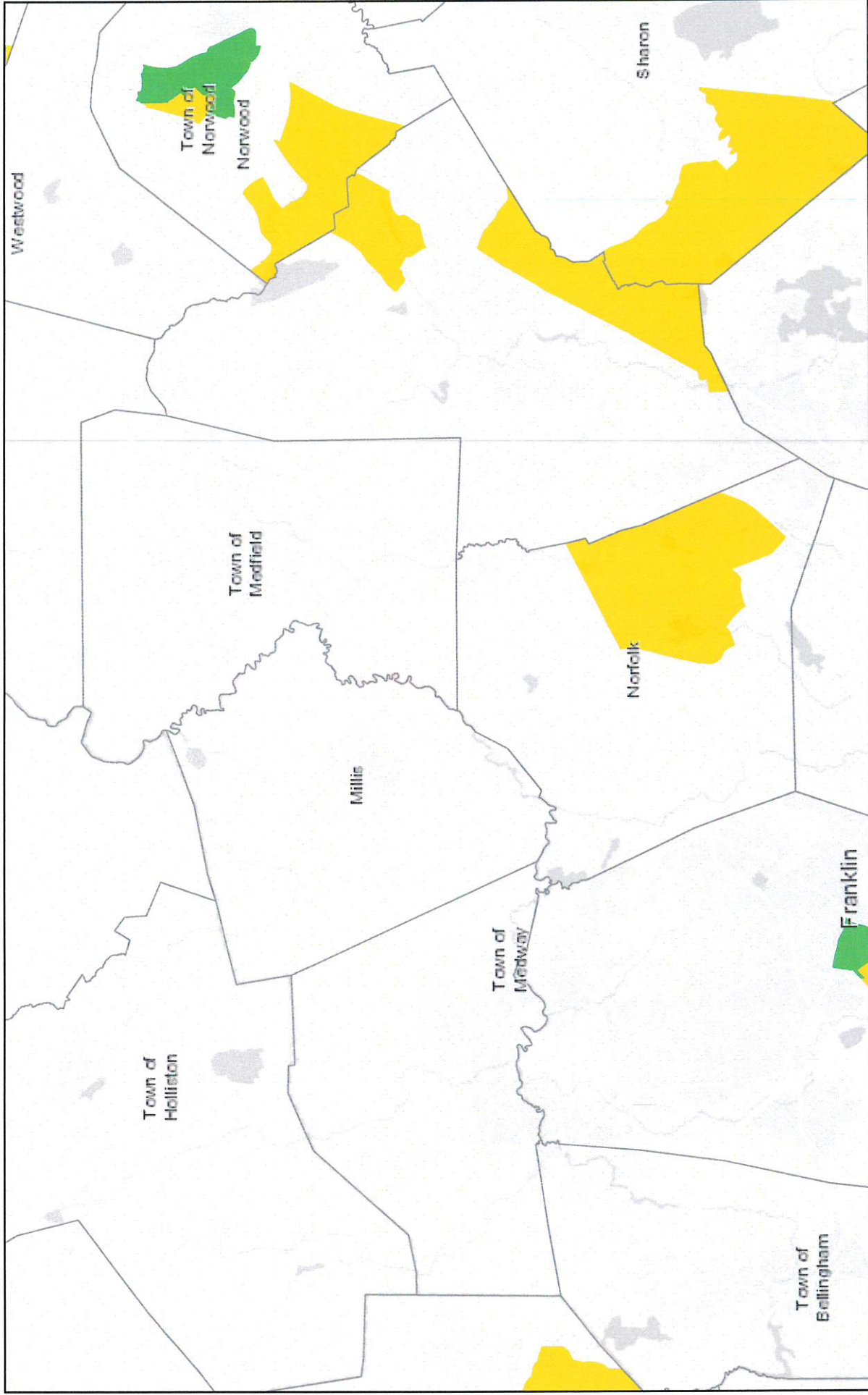
Request for water waiver of notification requirements in 314 CMR 16.04(4), (7), and (8):

The Town of Millis cannot meet the requirement to post the public notification on the Millis CSO web page at the same time as the public notifications are issued via email, when these emails are issued outside of Town's business hours. The Town does not currently employ a webmaster that work outside of regular business hours.

When public notifications emails are issued outside of Town business hours (8:00 AM – 4:00 PM Monday through Friday), the public notification will be posted on the website as soon as possible, and no later than 12:00 PM, the next business day.

When public notifications emails are issued during Town's business hours (8:00 AM to 4:00 PM, Monday through Friday), the public notification information will be posted on the website within (1) hour.

2020 Environmental Justice Populations



5/31/2022, 1:00:20 PM

MA Municipalities

1:144,448

0 0.75 1.5 3 mi
0 1.5 3 6 km

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community

MA Executive Office of Energy and Environmental Affairs
MassGIS, Esri, HERE, Garmin, USGS, EPA, NPS | Esri, HERE, NPS | EEA GIS |



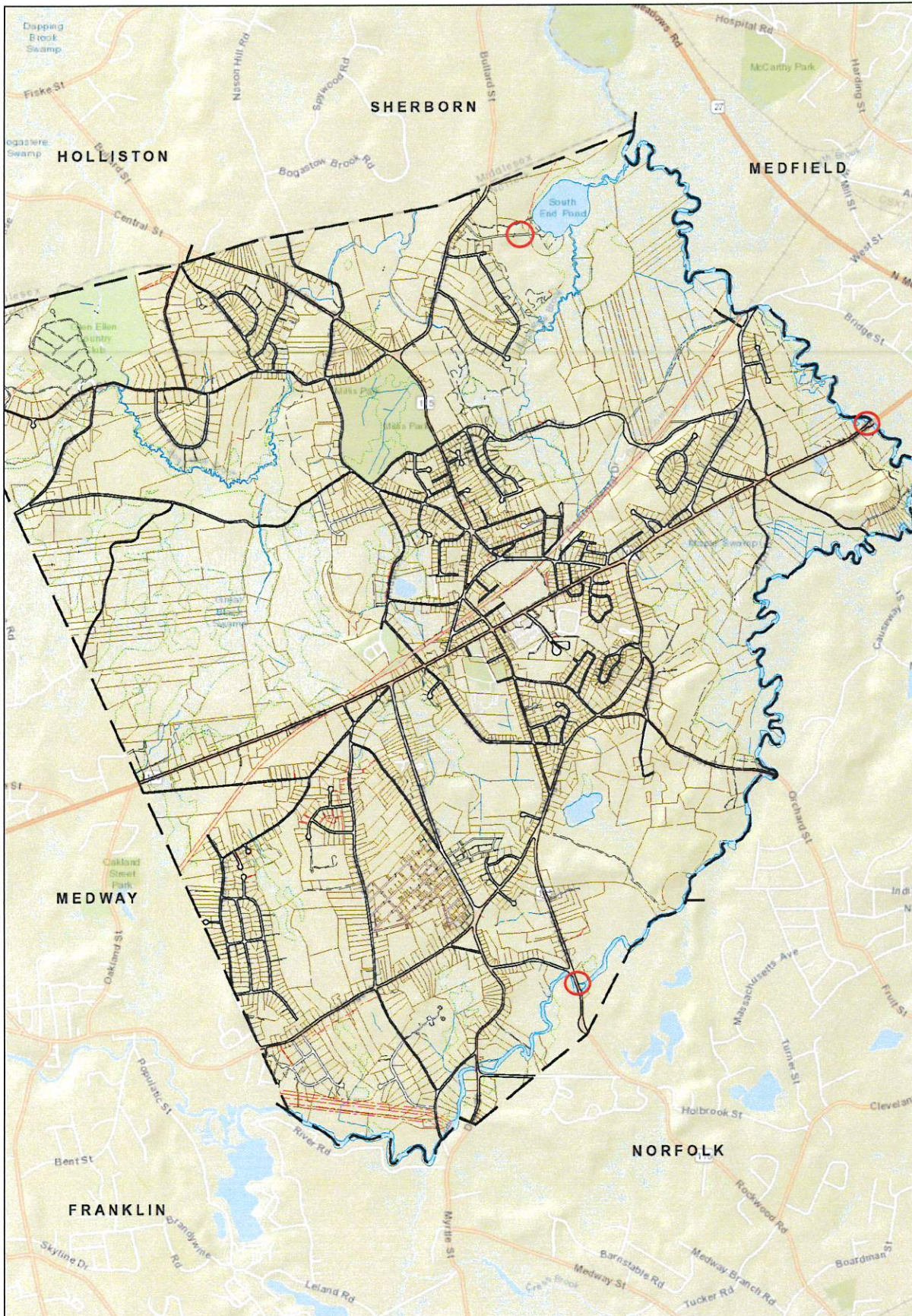
= BOH SSO SIGN LOCATIONS MILLIS

1 inch = 2233 Feet

0 2233 4466 6699



March 2, 2020



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.



**WARNING! AVOID CONTACT WITH WATER
MAY CAUSE ILLNESS**



There may be sewage in the water following a recent discharge or overflow event. The event began on [Date and Time] and ended on [Date and Time]. The **Millis Board of Health** can be contacted at: **(508) 376-7042** To determine the closure or advisory status of local shellfish growing areas, beaches, or other water resource areas, go to this website:

<https://www.mass.gov/regulations/314-CMR-1600-notification-requirements-to-promote-public-awareness-of-sewage-pollution>

1. RESPONSE INFORMATION

RESPONSE COORDINATOR & ALTERNATE

James McKay – Deputy DPW Director and Chief of Operations

DPW – 508-376-5424

Cell – 508-400-6379

Town Administrator – DPW Director

TH – 508-376-7040

Cell-

GOVERNMENTAL RESPONSE UNITS

- | | | |
|----|-----------------------------|-------------------|
| 1. | Director of Public Health | Tel. 508-376-7042 |
| 2. | Millis Police Department | Tel. 508-376-5112 |
| 3. | Millis Fire Department | Tel. 508-376-5112 |
| 4. | Millis Emergency Management | Tel. 508-376-7052 |
| 5. | MassDEP | Tel. 508-792-7650 |
| 6. | EPA of New England | Tel. 617-918-1870 |

(During business hours, and see Section 5, below)

The first response step when a Sanitary Sewer Overflow (SSO) occurs is to notify James McKay – he is responsible for managing the response and making key decisions. His responsibility is to assess the situation and initiate a series of response actions based on the type and severity of the event. The table below identifies the key personnel who will be responding in emergency situations.

Table 1: Responsibilities Chart

Name and title	Responsibilities during a SSO response	Contact numbers
Town Administrator - DPW Director	Responsible for overall management and decision making for the sewer collection system. Takes the lead for managing the response to a SSO, providing information to regulatory agencies , the public and news media. Responsible for determining the need to contact Fire department (for response to toxic spills and containment booms, eg), local conservation department(s), and/or town officials.	Phone: 508-376-7040 Cell:
Jim McKay Deputy DPW Director and Chief of Operations	Responsible for management and decision making for the sewer collection system. Coordinates DPW office personnel, field crews and contractor services from DPW Office. Takes the lead in managing the manpower response to a SSO. Implements response plan.	Phone: 508-376-5424 Cell: 508-400-6379
Deirdre Gilmore Kathy Smith DPW Department Assistants	Responsible for administrative functions in the office including receiving phone calls and keeping a log of events. Will provide a standard carefully pre-scripted message to those who call with general questions. Additional information will be released through the DPW Director and Deputy DPW Director.	Phone: 508-376-5424
David Rachmaciei	Supervises coordinates contractors and DPW Sewer crews in the field. Delivers emergency notices and supports Deputy DPW Director and Chief of Operations	Cell: 413-297-8713
Ron McKenney Sewer and Water Technician	In charge of operating the collection system, performing inspections, maintenance and relaying critical information, assessing facilities, and providing recommendations to the Deputy DPW Director and Chief of Operations	Cell: 508-962-9376

1.1 Recording the Report of Possible Sanitary Sewer Overflow (SSO)

Generally, telephone calls from the public reporting possible sewer overflows/ basement backups are received at the DPW Administrative Office.

For phone calls reporting overflows and backups, the DPW Department Assistant obtains all relevant information available regarding the overflow including:

- a. Time and date of the call;
- b. Specific location of the overflow;
- c. Description of problem (e.g., what is overflowing, extent of spill, if the cause is

obvious, etc.);

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 Sewer Department to quickly locate, assess and stop the overflow.

This information is also recorded in a Millis Sanitary Sewer Pump Station/Collection System Overflow Questionnaire (Ref. Appendix B) and the DPW Assistant notifies Deputy DPW Director to review the information and dispatch investigative personnel. See more detailed procedures in Sections 4 through 6, below.

1.2 Confirming Overflows

A Millis DPW sewer response crew is dispatched by the Deputy DPW Director to confirm the overflow (See Section 5, below).

1.3 Reporting Overflows

After confirmation, the sewer response crew completes a Millis Sanitary Sewer Pump Station/Collection System Overflow Questionnaire (Ref. Appendix B) and within 24 hours of the sewer overflows confirmation, the Deputy DPW Director provides the information by phone to the MassDEP and EPA (and see Section 6).

2. INTRODUCTION

Our collection system is an integral part of the Town of Millis's unseen infrastructure, taking sanitary wastes from residences, commercial establishments and industry to the Charles River Pollution Control Treatment Facility on Village Street in Medway. If the capacity of the collection system is exceeded, or if blockages occur, overflows may result. Untreated wastewater overflows that occur upstream of the treatment plant are called Sanitary Sewer Overflows (SSOs). SSOs are a threat to public health and the environment because the SSO may discharge pollutants such as pathogens, floatable materials, toxics, and other pollutants, all of which may impact public health, drinking water supplies, water quality and/or aquatic ecosystems.

2.1 Goals

The goal of this Sewer Overflow Response Plan (SORP) is to document Millis's plans for mitigating or preventing potential emergency overflows whenever possible, to prepare Millis's personnel and responding departments to deal efficiently with the effects of such events, and to protect health, environment, and property.

Quick response to an SSO will minimize the overflow impacts on public health, water quality, the environment, and customer service. This SORP is designed to ensure that appropriate crews are immediately dispatched to all reported SSOs to stop the overflow as quickly as possible; to minimize the effects of the overflow on public health and the environment; to minimize the impact of the overflow on collection system operations; and to report the overflow to the appropriate regulatory agencies, and to the public when warranted. The objectives of this plan include controlling waste discharge and providing procedures for managing sanitary sewer overflows, preventing harm to public

health and the environment, and satisfying regulatory and reporting requirements.

Additional objectives of the SORP are to: provide appropriate customer service, protect collection system personnel and the wastewater treatment plant, protect all parts of the collection system and protect private and public property beyond the collection and treatment facilities.

This plan will be updated as necessary to reflect any changes in staffing or notification requirements, including contact numbers. It should and must be revised as insight and experience dictate.

This plan is prepared pursuant to NEPDS Permit # MA0102598

2.2 Plan Organization

Overview (Description of Collection System)

Overflow Notification procedures

Response to Overflows

Overflow Reporting

3. OVERVIEW

This section provides a general description of the Town of Millis's collection system and critical facilities. Response personnel must be familiar with the collection system and its components to effectively execute the response procedures described in this plan. For further details on the collection system, crews are directed to our Preventive Maintenance Plan (PMP).

The Town of Millis has a population of approximately 7,900 of which approximately 60% percent are served by our collection system. The sewerage area extends westerly from the Medway town line and encompasses approximately 12 square miles as shown collection system plan labeled Figure 2 and located in Appendix M. The sewer system is divided into four sub-areas, all of which feed into the Charles River Pollution Control District Treatment Facility (CRPCDTF) located on Village Street in Medway. The four areas are labeled Sub-Basins 1, 2, 3 and 4 with Sub-Basin 1 being further divided into Sub-Basins 1-A, 1-B and 1-C. The collection system plan labeled Figure 2 in Appendix M provides more detail.

Millis's wastewater collection system includes the following components: approximately 126,000 linear feet of sanitary sewers; no siphons; 19,000 linear feet of force main; and five public pumping stations and five private pumping stations. The system is comprised of components ranging in age from 100 years to present. Materials include vitrified-clay, cast-iron, asbestos-concrete; cement-lined-ductile-iron, PVC, brick and precast concrete. The collection system is described in detail in prior sections of this report.

3.1 Specific Known Vulnerabilities

Certain areas of Millis are known to be more vulnerable to system blockages and overflows than others and require additional maintenance. These vulnerable areas include: the pipelines adjacent to area restaurants and apartment complexes which are identified in the preventive maintenance plan as "Trouble Spots" requiring annual

cleanings to prevent grease buildup.

3.1.1 Critical Gravity Pipe Segments

A review of past maintenance records and citizen complaints from 1990 to 2016 indicates that FOG has consistently contributed to the occurrence of SSOs in “Trouble Spots” within Sub Basins 1 and 2. Millis has increased maintenance (as described in the PMP) in these areas in response to the problems identified.

Although not a “Trouble Spot” as described previously, the 18” interceptor located along Main Street that conveys the majority of the wastewater from the Town of Millis to the Charles River Pollution Control District Treatment Facility could potentially affect adjacent low lying buildings, wetlands and streams west of the intersection of Pleasant Street in the event of a blockage resulting SSO. The 18” interceptor is a critical facility that conveys the majority of the Town’s wastewater to the treatment plant.

Based on this information, the following trouble spots have been identified as critical facilities within the collection system sub-areas.

Table 2: Critical Pipe Segments

Trouble Spot Location	Trouble Spot Location Map ID #	Collection System Sub Basin	Reason
Pipe segments/Manholes			
Union Street -Grease	MH 2.85 to 2.6	Sub Basin 2	Grease
Main Street	MH 2.100 to 2.96C	Sub Basin 2	Grease
Milliston Road	MH 2.112A to 2.104A	Sub Basin 1-B	Grease
Pleasant Street - Grease	MH 1.33 to MH 1.30	Sub Basin 1-B	Grease
Main Street – 18” Interceptor	MH 1.25 to MH 1.4	Sub Basin 1-C	Primary Line to Treatment Facility

3.1.2 Siphons

The Town of Millis sewer collection system does not contain siphons.

3.1.3 Pump Stations

The Town of Millis has five pumping stations in three of the collection system sub areas (see Table 3 on next page). Of the five pumping stations, there is one major pumping station:

- The Water Street pump station with peak flows of 250,000 GPD located at the DPW Building

The four other pump stations within the collection system primarily receive peak flows ranging from 4,000 to 20,000 GPD.

Table 3: Pumping Station Details and Potential Impact Areas

Pumping Station Location and Sub Area	Station Type	Max Flow (GPD)	Alarm system/ Emergency Power	Year Built	Potential Impact Area(s)
Water Street Sub Basin 2	Duplex Submersible Pumps	250,000	SCADA Alarm System and Fixed Standby Generator	2016	Downstream wetland and Stream
Timberline Street Sub Basin 1-A	Duplex Constant Head Centrifugal	20,000	SCADA Alarm System and Fixed Standby Generator	1989	Downstream wetland and Stream
Norfolk Road Sub Basin 1-B	Duplex Suction Lift Centrifugal	20,000	SCADA Alarm System and Fixed Standby Generator	1996	Downstream wetland and Stream
Dover Road Sub Basin 2	Duplex Submersible	10,000	SCADA Alarm System and Fixed Standby Generator	1999	Downstream wetland and Stream
Middlesex Street Sub Basin 1-A	Duplex Submersible	4,000	SCADA Alarm System and Fixed Standby Generator	2006	Downstream wetland and Stream

3.1.4 Force Mains

The Town of Millis waste water collection system includes five municipal force mains with a total length of 12,000 linear feet (lf). The force mains range in age from 1965 to 2006. The force main from the Water street Pump Station is the largest with peak flows of 250,000 GPD. The four other force mains within the collection system have peak flows ranging from 4,000 to 20,000 GPD. The size and material for each of the force mains are shown in Table 4.

Table 4: Force Main Piping

Location and Sub area name	Force main Diameter (in)	Force main Length (lf)	Pipe Material	Year Built (and replaced)
Water Street Sub Basin 2	10"	3,000	Ductile Iron	1985
Timberline Street Sub Basin 1-A	6"	800	Ductile Iron	1989
Norfolk Road Sub Basin 1-B	8"	2,300	Cast Iron	1965
Dover Road Sub Basin 2	4"	2,800	PVC	1999
Middlesex Street Sub Basin 1-A	4"	3,100	PVC	2006

All force mains have been identified as critical facilities because of the large volume of flow that they carry. Some of these force mains are located near environmentally sensitive areas such as wetlands, which are considered to be potential impact areas. Failures along these force mains can result in extensive damage and/or inconveniences to the public. The force mains and impact areas are listed in Table 5.

Table 5: Force Main Potential Impact Areas

Location of Force Main	Pump Station	Potential Impact Area(s)
Water and Union Streets Sub Basin 2	Water Street	Downstream wetland and Stream Roadway
Timberline Street Cross Country Easement to Southwood Sub Basin 1-A	Timberline Street	Downstream wetland and Stream Residential properties Roadway
Norfolk Road and Plain Street Sub Basin 1-B	Norfolk Road	Downstream wetland and Stream Roadway
Dover Road and Main Street Sub Basin 2	Dover Road	Downstream wetland and Stream Roadway
Middlesex and Exchange Streets Sub Basin 1-A	Middlesex Street	Downstream wetland and Stream Roadway

Specific response procedures vary according to the type of facility where the emergency is occurring. Response procedures for each of the critical facilities identified in this section are specified in Section 5. The emergency response procedures reflect the types of facilities and the likely types of failures and vulnerabilities in our collection system. Notification response, Section 4, below, provides the process and contacts for reporting sewer overflows.

4. OVERFLOW NOTIFICATION PROCEDURE

4.1 Overview

When an SSO or other collection system emergency occurs, a number of individuals must be notified. Depending on the size and severity of the problem, different notifications are needed. While minimum notification procedures are in place for all overflows, more specific notification procedures are required for more severe overflows. For example, a small, contained overflow with no impact to a water body or other sensitive area will have fewer notification requirements than an overflow that has discharged into surface water.

4.2 Receipt of Information Regarding an SSO

An overflow may be detected by Millis employees or by others. The Sewer Department is the primary department responsible for responding to SSOs. The Deputy DPW Director is responsible for acting based on received phone calls or reports of possible sewage overflow from the wastewater collection system, and providing immediate response to investigate and/or correct the problem.

Generally, telephone calls from the public reporting possible sewer overflows are received at the DPW office. Information is collected and dispatched as described in Section 1, Response Information. The Deputy DPW Director will confirm the overflow and implement measures to stop the overflow as noted in our procedures in Section 5, below.

The DPW office must report an SSO within 24 hours of the sewer overflow confirmation and provide the information by phone or email to the MassDEP, EPA and other agencies. A written report is submitted within 5 days per MassDEP requirements. (See

Appendix C for the Mass DEP - "Sanitary Sewer Overflow (SSO)/Bypass Notification Form and Instructions")

In addition, if the overflow may affect beach or swimming areas, or public drinking water intakes, the DPW shall notify the Local Board of Health, Department of Conservation and Recreation, and Drinking Water Resource managers by phone or email within 24 hours of becoming aware of the discharge and if the overflow results in a fish kill, the DPW shall also notify the MA Division of Marine Fisheries by phone or email within 24 hours of becoming aware of the results of the fish kill.

The DPW Director and the Deputy DPW Director are responsible for reviewing, updating and signing the final Sewage Overflow Report. The Sewage Overflow Reports and related information are kept in DPW filing system and Town file server. The information is reviewed by the Town of Millis - Selectman, DPW, Sewer Committee and Emergency Management Staff when considering response effectiveness or when reviewing scheduling of future maintenance or replacement of the affected sewer.

Pump/lift station failures are monitored by the SCADA system and received by the DPW personnel. The Sewer and Water Technician on duty immediately convey the information regarding alarms to Deputy DPW Director to initiate the investigation.

4.3 Notification Matrix

The notification matrix is shown in Table 6 on the next page to outline the responsibilities of staff for notification when a sanitary sewer overflow occurs.

Table 6 Notification Matrix

	DPW Assistants/ Police Dispatcher Contacts Day Crew/On Call Person and Deputy DPW Director	Deputy DPW Director James McKay DPW-508-376-5424 Cell-508-400-6379 CONTACTS this column:		
		In touch with Dispatched crew(s)	Contacts Outside Contractor, if necessary See Emergency Contact List – Appendix D	Contacts Police and Fire Departments or emergency responders as needed: See Emergency Contact List – Appendix D
	Day Supervisor/On Call Person Goes to site Keeps in touch with Deputy DPW Director, Organizes DPW personnel and equipment as needed at the site David Rachmaciel Cell-413-297-8713 Cell-508-962-xxxx (on call)	Deputy DPW Director contacts DPW Director Town Administrator TH-508-376-7040 Cell-508-330-4329 DPW Director contacts local government officials as appropriate. See Emergency Contact List - Appendix D.		
	Sewer and Water Technician SCADA operation and control Ron McKenney Cell-508-962-9376	State and Federal Oversight Agencies and other Agencies as appropriate. See Appendix C – MassDEP - Sanitary Overflow(SSO)/Bypass Notification Instructions and contact information		
		Local Health Department Director of Public Health Barbara Thissell TH- 508-376-7042 Cell-508-243-3282		
	Supervisor/Technician files logs and reports to Deputy DPW Director/Chief of Operations	Reference Comprehensive Emergency Contact List See Emergency Contact List – Appendix D		

5. RESPONSE TO OVERFLOWS

Response procedures provide guidance for the evaluation, mitigation and correction of the conditions that are causing or contributing to an unpermitted discharge of untreated wastewater. The primary objectives of these emergency response procedures are to provide standard protocols, minimize risk, and protect public health and the environment.

Emergency response procedures appropriate to the vulnerabilities, sensitive areas and critical facilities identified for Sewer Department have been developed. These

procedures reflect best management practice.

The Deputy DPW Director dispatches sewer maintenance personnel with appropriate equipment to confirm and contain the overflow, and determine the cause. Crews and equipment are available to respond to any SSO locations. The Millis Sewer Department currently has six crew members available for response during the day shift (7:00a.m. to 3:30p.m.) and an "On Call" crew member during the evening shift (3:30p.m. to 7:00a.m.) and when the SSO is confirmed all sewer department personnel are called in as required. The DPW relies on radio and telephone communication to dispatch personnel to the scene of the overflow.

While investigating emergencies the crew should maintain radio contact with the Deputy DPW Director at all times to keep them informed of the progress and any problem(s). Upon completing an assignment, and before returning to the DPW Yard, the crew should call the Deputy DPW Director by radio or telephone for any other assignment or update.

Additional maintenance personnel are placed "on call" by the Deputy DPW Director and General Foremen in the event extra crews are needed.

5.1 Preliminary Assessment

Upon arrival at the reported sewer overflow site, and based on observations, the sewer response crew may request additional personnel, material, supplies, and equipment from the Deputy DPW Director.

In all cases, response crews report their findings, including possible damage to private and public property, to the Deputy DPW Director immediately upon making their investigation. If the Deputy DPW Director has not received findings from the field crew within one (1) hour, the Deputy DPW Director contacts the response crew to determine the status of the investigation.

The Deputy DPW Director will visit the site of the overflow, if possible, to ensure that provisions of this overflow response plan are met. The Deputy DPW Director is responsible for informing MassDEP, EPA and other affected agencies of all SSOs within 24 hours of becoming aware of the release. (See Appendix C for reporting instructions)

If hazardous substances are suspected in the overflow, personnel are to immediately contact the Deputy DPW Director who will contact the Fire Department via 911 immediately.

5.2 SSO General Equipment

The following items are available to response crews. These items are stored either at the DPW or in each sewer department utility truck. Personnel are responsible for ensuring supplies are appropriate and in working order and are responsible to notify the Deputy DPW Director when additional supplies are needed. A full description of departmental staffing and equipment (including emergency equipment) is available in Section 7 of the PMP.

Located at DPW

Job Site Safety Equipment:

Ladder, traffic control devices such as flags and cones, flashing barricades, caution tape, safety harness and lifeline, tripod, safety rope, gas detector, silt fencing, flag stands, barricades, and detour arrow board.

Construction Tools:

Pipe saw, chainsaws, power broom, fire hose, and hydrant attachment with backflow preventer.

Personal Safety Equipment:

Hard hat, safety glasses, safety vests, gloves, rain suit, steel toed work and/or rubber boots, isopropyl alcohol, and ear protection.

First Aid Kit, flashlight, waterless soap and hand towels.

Other:

Sandbags, sand trap, log forms, portable blower and sufficient hose, high intensity flash light, gas meters, dye.

Located on Sewer Department Utility Trucks

Construction Tools:

Clean rags, tape, assorted hand tools (e.g., screwdrivers, wrenches, hammers, brooms, sledge hammers, pry bars), bucket with rope, assorted ropes, picks and shovels, spray paint, pipe locator.

Personal Safety Equipment:

Hard hat, safety glasses, safety vests, gloves, rain suit, steel toed work and/or rubber boots, and ear protection, First Aid Kit, flashlight, waterless soap and hand towels.

Inspection:

As with any vehicle or major equipment, the operator should perform a pre-use inspection before beginning work activities.

Crews are instructed to have and use the job site and personal safety equipment that is appropriate for each emergency situation.

Confined Space Entry:

For permit required confined space entries, all personnel shall refer to the model and procedures in Appendix I.

5.3 Specific Response Procedures

PROBLEM: Sewer Blockage or Back up into Basement

PROBLEM: Overflowing Sewer Manhole Resulting from Surcharged Trunk Sewer
(No backup into building)

PROBLEM: Cavities and Depressions in Streets and Lawns

PROBLEM: Sewage Force-Main Break

PROBLEM: Sewer Main Break/Collapse

PROBLEM: Air Release and Vacuum Relief Valve Failure

PROBLEM: Waste Water Pump Station Alarms General Response Actions

PROBLEM: Pumping Station Failure Caused by Secondary Power Failure during
Power Outage

PROBLEM: Pumping Station Failure Inside Valve Pit, pump or valve failure
(submersible type application)

5.3.1 **PROBLEM:** Sewer Blockage or Back up into Basement

EMERGENCY PROCEDURES:

- Deputy DPW Director refers to sewer maps for location and to determine critical facilities and sewer sub-area to provide to dispatch crew. If the area of the complaint is served by a pump station, check to confirm whether any alarms from the pump station have been received.
- Dispatch the crew immediately to the complainant address with details. Crew notifies complainant/property owner(s) when they are on site.
- If the flow is questionable (not reasonable for the given service area) go to the upstream manhole to visually compare flows.
- If the flow from both manholes is reasonable for the area, notify the property owners that the problem is in their service lateral and to contact a plumber or sewer service contractor to relieve the blockage as described under '**Steps to be Taken By Property Owners When Sewage Back-Up Is Determined to be Due to Blockage In Private Lateral Connection**'. Provide copy of the steps to the homeowner from this section.
- If the downstream manhole is full and there is a potential for overflow, immediately begin the set up for pumping around the blockage (see "Overflowing Sewer Manhole Resulting from Surcharged Trunk Sewer (No backup into building)" procedure)
 - Request additional manpower and equipment as needed (e.g. excavating crew, bypass pumping equipment, etc.)
 - Set up pump out equipment and hoses from the upstream manhole to the nearest flowing manhole below the blockage.
- Continue checking manholes downstream until a dry manhole is found indicating a blockage upstream.
 - See "**Overflowing Sewer Manhole Resulting from Surcharged Trunk Sewer (No backup into building)**" procedure for pumping around the blockage while the line is repaired
 - **Note:** if no blockage is found and the problem is attributable to a pump station problem refer to Pump Station responses.
- If vactor and jetter are available, jet line and have vactor clear. If not, install the proper size sandtrap in the downstream invert of the manhole before clearing the blockage to capture the debris.
- Remove the debris from the manhole and observe it to try to determine the cause of the blockage.
- Use the necessary equipment to relieve the blockage, either by jet flushing or power rodding (if jet flushing is not sufficient to clear the blockage, request staff to bring power rodding equipment).
- Notify supervisor and describe the blockage. The supervisor will notify the proper authorities and agencies (See responsibility chart).
- Cordon off the area if ponding occurs on the street or easement (public or private).
- Collect as much of the sewage as possible, disinfect according to policy, use closest hydrant and hose down affected area, use powdered lime on grassed areas to control odor if needed, vactor out affected roadway catch basins, notify

surrounding homes (Deputy DPW Director notifies appropriate officials, as needed).

- Notify Deputy DPW Director to schedule a television inspection.
- If the blockage is in a public line, relieve the blockage, clean up the property owner's basement as per policy on disinfecting, which may involve hiring a professional cleaning company. If blockage is determined to be in property owner's lateral connection, direct property owner to hire a licensed plumber to clear the line.
- General Foreman to make out a report indicating the time of the call, a description of the problem, repair work done, personnel present and equipment used.
- If sewage overflowed the collection system, file the Mass DEP - Overflow Notification Log and Overflow Report Form as required (see responsibilities chart).

NOTES:

1. When available, use collected debris to try to determine the cause of the blockage. Confirm removal of all debris from the manhole.
2. Record the water damage to all items in the basement. Record all actions taken (from start to finish) in log/record book, including equipment and personnel that were utilized.

Sewer Blockage or Back up into Basement, Minimum Levels of Staffing (people): 2	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none"> • Jet flushing unit if available (sand trap) • Rodding machine & associated cleaning/cutting attachments (sand trap) • Standard disinfectants • Power vacuum • Portable pumps • Portable generators • Fire Hose and Backflow Preventer Valve • Safety cones/barricades • <u>For Confined Space Entry if Required:</u> • Gas meter – for oxygen deficient, explosive or toxic gases • Confined space entry tripod and associated equipment • Standard harness and lifeline if applicable • Air blower with hose 	<ul style="list-style-type: none"> • Closed Circuit Television camera unit • Vactor unit • Power saw (circular) • Sand trap

Millis Sewer Department

STEPS TO BE TAKEN BY PROPERTY OWNERS WHEN SEWAGE BACK-UP IS DETERMINED TO BE DUE TO BLOCKAGE IN PRIVATE LATERAL CONNECTION

After the Collection System crew has checked the Millis sewer for blockage and has found that the public sewer is not blocked, they will notify the property owner. It is Millis's town policy that if the main sewer is clear then the property owner must hire a licensed plumber, drain layer, or sewer cleaner to free any blockage, which might exist in the private lateral. The property owner is responsible to pay for this activity.

NOTE: PROPER RODDING PROCEDURE GUIDELINE FOR PROPERTY OWNERS TO CLEAR PRIVATE LATERAL SEWER CONNECTION

If the blockage is found in the portion of the sewer house connection located within private property, the owner must hire a licensed plumber or contractor to perform the necessary repair work, under permit and inspection from the Millis Building Department and Plumbing Inspector.

The Building Department requires proper rodding procedures. In cases where a property owner needs to free a blockage within their lateral, the plumber must use a 4" cutter at the end of the rod. If they can't break through the blockage, they will then start using smaller cutters back up to 4". If the plumber relieves the blockage, they must then rod the house connection to the main sewer line.

All repair work on the sewer house connection outside the building must be performed under permit issued by the Sewer Department to a licensed contractor, and will be inspected by the local Sewer Department personnel.

WARNINGS:

If the property owner, licensed plumber, drain layer or sewer cleaner does not call the DPW and request the public sewer line to be checked prior to rodding, the Town will not assume liability if the problem is located in the public sewer line.

If there is a blockage, but no record of the house connection, the owner must prove where the blockage is located. This can be done by excavation or electronic locator in the presence of an inspector.

5.3.2 PROBLEM: Overflowing Sewer Manhole Resulting from Surcharged Trunk Sewer (No backup into building)

EMERGENCY PROCEDURES:

- Dispatch the crew immediately to the problem location.
 - Refer to sewer maps for location of sewers (private lands, flow patterns, manholes, etc.) and determine if the area is served by a pump station before responding to the call.
- Go to the location of the overflowing manhole to assess the immediate danger to public health or the environment.
- Determine the location of the blockage by inspecting the downstream manholes until a dry manhole is found. Immediately begin the set up for pumping around the blockage
 - Request additional manpower and equipment as needed (e.g. excavating crew, bypass pumping equipment, etc.) or to help with evaluating options for pumping around the blockage.
 - Set up pump out equipment and hoses from the upstream manhole to the nearest flowing manhole below the blockage.
- Install the proper size sandtrap in the downstream invert of the manhole before clearing the blockage to capture the debris. Remove the debris from the manhole and assess it to try to determine the cause of the blockage.
- Use the necessary equipment to relieve the blockage, either by jet flushing or power rodding. If jet flushing is insufficient to clear the blockage, request sewer crew to bring power rodding equipment.
- If it is imminent that the waste water will be released into wetlands, receiving waters or a drinking water supply watershed, contact Deputy DPW Director to call in outside pump and vacuor contractor and who will call in extra crew and coordinate emergency equipment. The Deputy DPW Director will also notify the proper authorities and agencies including the fire department to set up flotation booms across streams, brooks, etc. if necessary. (See responsibility chart)
- Gather and remove sewage related debris and organic matter from the affected area.
- If the wastewater is in the streets/roads (public or private), use sand bags or earth berms to contain the waste water to minimize any impact to public health or the environment.
- Sandbag nearby catch basin inlets or paved leak-offs to prevent the waste water from entering the drainage system and causing potential contamination to the receiving waters.
- Cordon off the area if ponding occurs.
- Collect as much of the sewage as possible, disinfect according to policy, notify surrounding homes (Deputy DPW Director notifies appropriate officials, as needed).
- If the waste water jeopardizes a playground or park, cordon off the entire area. Close the park to the public until the issue has been remedied to the satisfaction of the local and state boards of health and the local park superintendent.
- Complete a report indicating the time of the call, description of the problem, repair work done, personnel present and equipment used.

- If sewage overflowed the collection system, file the MassDEP Overflow Notification Log and Overflow Report Form.

Overflowing Sewer Manhole, Minimum Levels of Staffing (people): 2-3	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none"> • Jet flushing unit if available (sand trap) • Rodding machine & associated cleaning/cutting attachments (sand trap) • Standard disinfectants • Fire Hose and Backflow Preventer Valve • Power vacuum • Portable pumps • Portable generators • Safety cones/barricades • Caution Tape • Sand bags • <u>For Confined Space Entry if Required:</u> • Gas meter-for oxygen deficient, explosive or toxic gases • Confined space entry tripod and associated equipment • Standard harness and lifeline if applicable • Air blower with hose 	<ul style="list-style-type: none"> • CCTV camera unit • Truck with hoist • Vactor unit • Power saw (circular) • Caution tape • Sand trap • Floatation booms if necessary

5.3.3 PROBLEM: Cavities and Depressions in Streets and Lawns

EMERGENCY PROCEDURES:

- When a call is received from the public, confirm the following:
 1. That the problem area is in fact a cavity or depression and not a missing or low manhole cover, gate box cover or catch basins grate.
 2. The location of the reported cavity and the name and address of the party making the call.
- If the caller indicates the problem is severe, extensive or obviously associated with the sewer or water system, investigate and barricade the condition if it appears appropriate to do so. Lights and barricades should be used if the situation is dangerous. Notify the water department immediately to aid in the cause investigation.
- When checking a depression over a main sewer, it is important to check the main sewer at both the upstream and downstream manholes adjacent to the depression to determine if there is a restriction of flow. If there is a blockage, it may indicate a possible main sewer break.
- If the cavity is a result of a sewer failure, refer to procedures for sewer main collapse and repair as appropriate.
- If it has been determined that it is a cavity or depression caused by other utilities (storm drain, water main, etc.), the crew should notify the Deputy DPW Director, and request that they take over the repair.
- The crew leader should thoroughly document the nature and extent of the impacts including the use of photographs and video footage where possible.
- Make out a report indicating the time of the call, a description of the problem, the repair work done, personnel present and equipment used.
- If sewage overflowed the collection system, file MassDEP Overflow Notification Log and Overflow Report Form.

Cavities and Depressions in Streets and Lawns , Minimum Levels of Staffing (people): 1	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none">• Safety cones/barricades• Refer to emergency procedures for sewer break if confirmed	<ul style="list-style-type: none">• Caution tape

5.3.4 PROBLEM: Sewage Force-Main Break

EMERGENCY PROCEDURES:

- Dispatch a crew to the site to assess the situation, including determination of whom and what might be affected and the immediate danger to the environment.
- Refer to sewer maps for location of sewers (private lands flow patterns, manholes, etc.) and determine the pump station associated and which critical facilities are in the area.
- Set up traffic cones and barricades as needed.
- Initiate measures to contain the sewer overflow, protect any streets, public areas, catch basin inlets, etc. that might be subject to flooding, and collect wastewater that has been discharged so as to minimize impact to public health and the environment.
- If pumping around the break is not possible, Deputy DPW Director to utilize a vactor truck or septage hauler (See Appendix D – Emergency Contact List) to draw down the wet well as much as possible and maintain a low level.
- Lock out and tag out (LOTO) the main line, disconnect and standby power transfer switch. Place pumps in the off position.
- Call in additional crews as necessary to help contain the sewer overflow. Set up flotation booms across streams; sandbag storm drains, etc., as necessary.
 - Check the tributary area to determine if the discharge will affect any receiving waters.
 - If it is determined that the receiving water may be affected, the Deputy DPW Director should notify the proper authorities or agency.
 - If the wastewater is in streets/roads (public or private), contain the waste water to the extent possible with sandbags or earth berms.
 - Sandbag nearby catch basin inlets or paved leak-offs to prevent the wastewater from entering the drainage system and causing potential contamination to the receiving waters.
 - Cordon off the area if ponding occurs.
 - Collect as much of the sewage as possible, disinfect according to Town policy, notify surrounding homes (superintendent notifies appropriate officials, as needed).
 - If the wastewater jeopardizes a playground or park, cordon off the entire area. Close the park to the public until the issue has been remedied to the satisfaction of the local and state boards of health and the local park superintendent.
 - Gather and remove sewage related debris and organic matter from the affected area.
- Drain the force-main: - Check valve can be manually operated
 - Close down the gate valve on the upstream side of the discharge check valve in the pumping station.
 - Open the check valve by hand and secure it in place.
 - Slowly bleed the force-main back into the wetwell by slowly opening the gate valve on the discharge side of the pump, but only to the point where the force-main stops leaking and there is enough room to make the repair. Constant communication must take place between the crew located at the break and the crew located at the pump station.

- Close the gate valve and return the check valve to its normal operating position and then fully open the gate valve.
- Drain the force-main: - Check valve cannot be manually operated
 - If pumping around the break is not possible, Deputy DPW Director to utilize a vactor truck or septage hauler (See Appendix D – Emergency Contact List) to vactor or pump out the contents of the force main until emptied at the location of the break during the excavation and repair of the force main.
- Repair force main break as per policy with DPW excavation equipment and trucks or Deputy DPW Director to utilize outside excavation contractor (See Appendix D – Emergency Contact List).
- Determine the location of the break/collapse and make any necessary repairs. Use repair procedures consistent with policy. If the break is on the pipe length, then a repair can be made with a wrap-around sleeve. If the break is at the bell, then a bell-joint clamp may be used.
- After the repair is complete, remove LOTO and return the pumps to normal operating position.
- Run the pump in the hand manual position to fill the force-main (Care must be taken during filling of force main – use only one pump during filling). Once completed, observe several pumping cycles before completely back-filling the excavation.
- Upon confirmation of adequacy of the repair, backfill the excavation (if necessary) and restore surface conditions to match existing conditions.
- While the crew is restoring the excavation, the crew leader should conduct a preliminary assessment of damage to private and public property. The crew leader should thoroughly document the nature and extent of the impacts including the use of photographs and video footage where possible.
- Make out a report indicating the time of the call, a description of the problem, the repair work done, personnel present and equipment used.
- If sewage overflowed the collection system, file MassDEP - Overflow Notification Log and Overflow Report Form.

Sewage Force-Main Break, Minimum Levels of Staffing (people): 4-5	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none"> • Portable bypass pumping units • Fire Hose and Backflow Preventer Valve • Sand bags • Hoses • Standard disinfectants • Power vacuum • Portable generators • Safety cones/barricades • DPW excavation equipment and trucks 	<ul style="list-style-type: none"> • CCTV camera unit • Vactor unit or septage hauler • Power saw (circular) • Caution tape • Sand trap • Floatation booms if necessary • Outside excavation Contractor

5.3.5 PROBLEM: Sewer Main Break/Collapse

EMERGENCY PROCEDURES:

- Dispatch a crew to location of break/collapse immediately while referring to the sewer maps for location of sewers (private lands flow patterns, manholes, etc.) to determine which critical facilities are in the area.
- Crew sets up signs, barricades, and/or barrels for traffic control and public safety, rerouting traffic as necessary and deploying traffic control measures such as police or flag person as needed.
- If it is a main line break, the Deputy DPW Director shall notify the appropriate authorities and town officials immediately.
- Request additional manpower and equipment as needed based on initial damage assessment (e.g. excavating crew, equipment to pump around the break, etc.)
- Pumping around the break from the upstream manhole to the downstream manhole may be required. If necessary, set up bypass pumping equipment. If not necessary, prepare for repairs while the pipe is flowing.
- Call in additional crews to set up flotation booms across streams, install sandbags, etc., as necessary. Unless special conditions exist, **pumping around the failed sewer main is a priority** before containing the overflow.
- Gather and remove sewage related debris and organic matter from the affected area.
- If the wastewater is in the streets/roads (public or private), use sand bags or earth berms to contain the wastewater to minimize any impact to public health or the environment.
- Sandbag nearby catch basin inlets or paved leak-offs to prevent the waste water from entering the drainage system and causing potential contamination to the receiving waters.
- Cordon off the area if ponding occurs.
- Collect as much of the sewage as possible, disinfect according to policy, notify surrounding homes (Deputy DPW Director notifies appropriate officials, as needed).
- If the waste water jeopardizes a playground or park, cordon off the entire area. Close the park to the public until the issue has been remedied to the satisfaction of the local and state boards of health and the local park superintendent.
- Determine the location of the break/collapse and make any necessary repairs. Use repair procedures consistent with policy. If the break is on the pipe length, then a repair can be made with a new section of pipe and watertight adapter couplings
- Upon confirmation of adequacy of the repair by the lead foreman or technician, backfill the excavation (if necessary) and restore surface conditions to match existing conditions.
- To restore the sewer line to full capacity, the crew should remove any debris that may have entered and accumulated in the sewer line downstream and upstream from the break/collapse. The crew should clean the sewer line as described below.
- Install the proper size sandtrap in the downstream invert of the downstream manhole to trap any debris which may have accumulated in the sewer line.

- Using a high velocity jet-flushing vehicle, begin flushing from the downstream manhole against the flow to the upstream manhole.
- Repeat this procedure for several upstream and downstream pipe reaches.
- The crew leader should thoroughly document the nature and extent of the impacts including the use of photographs and video footage where possible.
- Make out a report indicating the time of the call, a description of the problem, the repair work done, personnel present and equipment used.
- If sewage overflowed the collection system, file MassDEP - Overflow Notification Log and Overflow Report Form.

Sewer Main Break/Collapse, Minimum Levels of Staffing (people): 4	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none"> • Portable bypass pumping units • Hoses • Fire Hose and Backflow Preventer Valve • sandbags • Jet flushing unit if available (sand trap) • Standard disinfectants • Power vacuum • Portable pumps • Portable generators • Safety cones/barricades • DPW excavation equipment and trucks 	<ul style="list-style-type: none"> • CCTV camera unit • Vactor unit • Power saw (circular) • Pipe cutter (hydraulic) • Sand trap • Caution tape • Floatation booms and sand bags as necessary • Outside excavation Contractor

5.3.6 PROBLEM: Air Release and Vacuum Relief Valve Failure

EMERGENCY PROCEDURES:

- These valves require annual inspection and maintenance. Their failure is often found during routine inspections. Both these types of valves may fail to operate reliably if grease is allowed to accumulate in the valve or on the operating mechanism.
- Inspection crew should inspect valves in accordance with the specific manufacturer's recommendations.
- Attach fittings at the top and the bottom to permit back flushing of all valves upon initial installation or retrofit upon failure.
- Isolate the valve from the force-main by closing the shutoff valve attached to the force-main.
- To clean the internal components of the valve(s), attach a back-flushing hose to a pressurized water source using a quick disconnect coupling.
- Place a blow off discharge hose in a container to collect the back-flush water from the blow off valve. This is wastewater that should not be discharged onto the street or into the valve pit.
- Open the shutoff valve and back-flush the valve through the blow off valve at the bottom.
- If you are using a potable (drinking) water source, provide the system with an anti-siphon device or back flow to prevent contamination of the potable water.
- Make out a report indicating the time of the call, description of the problem, repair work done, personnel present and equipment used.
- If sewage overflowed the collection system, file MassDEP - Overflow Notification Log and Overflow Report Form.

Air Release and Vacuum Relief Valve Failure, Minimum Levels of Staffing (people): 3	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none">• Hose with quick disconnect fitting and anti-siphon or backflow preventer device• Blow off discharge hose and waste container• Standard disinfectants• Portable pumps• Portable generators• Safety cones/barricades• <u>For Confined Space Entry if Required:</u>• Gas meter-for oxygen deficient, explosive or toxic gases• Confined space entry tripod and associated equipment• Standard harness and lifeline if applicable• Air blower with hose	<ul style="list-style-type: none">• Truck with hoist• Vactor unit• Power saw (circular)• Caution tape

5.3.7 PROBLEM: Wastewater Pump Station Alarms General Response Actions **EMERGENCY PROCEDURES:**

- Utilize the SCADA system at the DPW or use remote tablet or login to determine the alarm that was triggered and the location of the pump station.
- Send an individual to the station indicating an alarm as soon as possible for a Priority Alarm. **Responders should bring a detailed station-specific trouble-shooting guide with them for that particular station.** If serious trouble is found, call for additional assistance and keep an individual at the station until further instructions are received.
- Personnel called in to investigate pump station alarms shall respond to the station even if the alarm has cleared prior to their arrival. All alarm conditions are to be checked and logged. Use the following guidelines and follow confined space entry procedures if applicable:

Wetwell/Drywell Type Stations

1. Observe all safety precautions per training.
2. Check the atmosphere within drywell with gas meter prior to entering.
3. Upon entry, identify the storage capacity in the well. This will give some indication of the time available for response. If flooded, skip to pump-out steps under "Pumping Station Failure inside valve pit, pump or valve failure" procedure.
4. Take your time entering the drywell. Never enter a flooded drywell.
5. Note any unusual odors - i.e. burning electrical equipment or paint.
6. Listen and note any unusual noises.
7. Check for heat around pump motors and pump bearing housings. Note any which seem unusually hot.
8. Observe every piece of equipment in the station. Note anything that looks out of place.
9. Review all SCADA monitoring data; gauge readings including wet well level, hour meters, flow charts, on-off levels, psi gauges on pump, rpm (on VFD's) and anything else that you feel is significant.
10. Using available information and the trouble shooting guide, systematically run through the system. Use a process of elimination to identify the cause of the failure. Check the level controls; check pump operation using manual position, check pump output by pressing on check valve counterweight as defined in the trouble-shooting guide. Once the cause of the problem is isolated, engage mechanical or electrical disciplines for repairs.
11. Emergency personnel should be absolutely certain that the cause of the pump station alarm or failure has been properly identified and corrected prior to leaving the station.
12. Reset any/all alarm feature indicator lights.

Wetwell/Submersible Type Stations

1. Take all safety precautions per training.
2. Check the atmosphere within the wetwell with a gas meter prior to working over the top of wetwell and after opening the hatch doors.
3. Identify the storage capacity in the well. This will give some indication of the time available for response. If flooded, skip to pump-out steps under

"Pumping Station Failure pump failure" procedure.

4. Note any unusual odors - i.e. burning electrical equipment, hot or smoking oil, or paint.
 5. Listen for any unusual noises and note if pump(s) are running.
 6. Observe every piece of equipment in the station (pay specific attention to the level control system). Note anything that looks out of place.
 7. Review all SCADA monitoring data; all gauge readings from the control panel including: wet well level, hour meters, flow charts, on-off levels, psi gauges on pump, rpm (on VHD's) and anything else that you feel is significant.
 8. Using available information and the trouble-shooting guide, systematically run through the system. Use a process of elimination to isolate the cause of the failure. Check level controls; check pump operation using manual position, check pump output by observing the check valve counterweight as defined in the trouble shooting guide or flow meter. Once the cause of the problem is isolated, contact Deputy DPW Director to engage mechanical or electrical disciplines for repairs
 9. Emergency personnel should be absolutely certain that the cause of the pump station alarm or failure has been properly identified and corrected prior to leaving the station.
 10. Reset any/all alarm feature indicator lights.
- Check the O&M manual to trouble shoot the level sensor system and pump controls
 - If a breaker is off and the pump motor is hot to the touch, DO NOT attempt to reset and start. If a pump motor is simply warm, one attempt to restart can be made. Turning the selector switch to manual will normally start a pump, and the check valve arm should open. If the pump has lost prime or is plugged, the check valve will not open.

Wastewater Pump Station Alarms General Response Actions, Minimum Levels of Staffing (people): 2	
Minimum Emergency Equipment	Specialized Equipment
Gas meter-for oxygen deficient, explosive or toxic gases	As applicable for trouble-shooting

5.3.8 PROBLEM: Pumping Station Failure Caused by Secondary Power Failure during Power Outage

EMERGENCY PROCEDURES:

- Dispatch the pump station crew to the pumping station immediately.
- Upon entry, identify the storage capacity in the well. This will give some indication of the time available for response. If flooded, skip to pump-out steps under "Pumping Station Failure, pump failure" procedure.
- If pumping wetwell is required to prevent overflow, Call Deputy DPW Director to utilize a vacor truck or septage hauler (See Appendix D – Emergency Contact List) to draw down the wet well as much as possible and maintain a low level.
- Deputy DPW Director shall request the assistance of the power company in restoring power to the station if necessary. Determine the estimated time of arrival of the power company crew and then notify the pumping station operators.
- As they approach the pumping station, the pumping station crew should check the overhead power lines for fuses that might have blown or down power lines. If the crew notices a blown fuse or down power line, identify the location and pole number(s), and notify the dispatcher to relay this information to the power company.
- Lock out and tag out (LOTO) the main line, disconnect and transfer switch (if applicable).
- Check all components of the dedicated generator to determine failure cause. Use the manufacturer-prepared trouble-shooting guide to aid in diagnosis.
- Obtain the services of a qualified generator repair facility to address the dedicated generator failure.
- Once fully repaired, operate the dedicated unit through several pump cycles.

Pumping Station Failure Caused by Secondary Power Failure During Power Outage, Minimum Levels of Staffing (people): 2-3	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none">• Flash light• Emergency lighting• Portable generator	<ul style="list-style-type: none">• Power testing equipment

5.3.9 PROBLEM: Pumping Station Failure, Pump Failure
(Submersible Station)

EMERGENCY PROCEDURES:

- Dispatch pumping station crew to the pumping station immediately.
- Prior to viewing the wetwell, measure the atmospheric conditions for sufficient oxygen and the presence of explosive or toxic gases.
- Upon arrival the crew should identify the storage capacity in the wetwell. This will give some indication of the time available for response. If flooded, skip to pump-out steps.
- Inspect the main controls looking for failure indications and review SCADA monitoring data. Check processor to determine failure if applicable. If pump failure is determined, skip to wetwell inspection steps.
- Constantly monitor the atmospheric conditions while working in or above the wetwell. Inspect the wetwell. Check the wetwell floats or level control system, bar rack and pump volute area for clogging or other problems.

Pump-Out Steps

- If pump failure, switch to back up pump, determine if pump out is necessary. If unnecessary, skip to repair procedures.
- If pumping wetwell is required to prevent overflow, Call Deputy DPW Director to utilize a vacuor truck or septage hauler (See Appendix D – Emergency Contact List) to draw down the wet well as much as possible and maintain a low level.

Repair Steps

- Lock out and tag out (LOTO) the main line, disconnect and transfer switch (if applicable).
- Monitor the atmospheric conditions for sufficient oxygen and the presence of explosive or toxic gases. If safe, enter wet well and inspect the piping and valves for cause of failure.
- Using available information and the trouble-shooting guide, systematically run through the system. Use a process of elimination to isolate the cause of the failure. Check level controls; check pump operation using manual position, check pump output by observing the check valve counterweight as defined in the trouble shooting guide or flow meter. Once the cause of the problem is isolated, contact Deputy DPW Director to engage mechanical or electrical disciplines for repairs
- Complete repairs to pipe, pump as per policy. If permanent materials are not readily available, install temporary repairs until the permanent repairs can be completed.
- Restore facilities to normal and inspect other components of the force main and pumping system for signs of similar failure.
- If no leaks are observed, return pumps to normal conditions by removing LOTO. Monitor pumps to check lead/lag operations.
- Make out a report indicating the time of the call, description of the problem, the repair work done, personnel present and equipment used.

- If sewage overflowed File MassDEP - Overflow Notification Log and Overflow Report Form.

Pumping Station Failure Caused by Force-Main Break inside valve pit, pump or valve failure, Minimum Levels of Staffing (people): 2-4	
Minimum Emergency Equipment	Specialized Equipment
<ul style="list-style-type: none"> • Harness and lifeline • Flash light • Emergency lighting • Portable pumps and hoses • Gas meter-for oxygen deficient, explosive or toxic gases 	<ul style="list-style-type: none"> • Self Contained Breathing Apparatus (SCBA) • Truck with hoist • Vactor unit • Power saw (circular)

5.4 Emergency Support

Addressing some problems may require resources beyond the Town of Millis's forces. This is particularly true of main line breaks where there is a risk of a significant sewer overflow. In these situations, the Millis DPW and Sewer Department may enlist the aid of an emergency contractor. Millis DPW and Sewer Department maintains a general services agreement with several companies for situations that require the prompt reconstruction of sewer lines or pump stations.

These companies are capable of mobilizing construction equipment and personnel quickly to handle emergency assignments. The Millis DPW and Sewer Department contract for emergency sewer repairs requires the contractor to respond to the site within 2 hours of notification to mobilize. This response time and the level of response will vary due to several factors, some are identified below:

- Location of the sewer repair in relation to the contractor's equipment yard
- Scope of the repair, size of sewer, depth of sewer and volume of flow
- The size, type and availability of equipment and number of workers
- The time of day, day of the week and the proximity to a holiday
- Weather conditions, clear, rain, snow, extreme cold or heat

See Appendix D for Emergency Contact List, which includes list of emergency contractors.

6. OVERFLOW REPORTING

6.1 Overview

The DPW Director and Deputy DPW Director complete an Overflow Report (See Appendix C). The Responsibilities Chart in Section 1 and the Notification Matrix in Section 4 provide guidance on proper reporting. The DPW Director and Deputy DPW Director or designee promptly notifies appropriate department and agencies when the overflow is eliminated. The information collected will also provide the Millis DPW and Sewer Department with valuable information to inform decisions regarding collection system rehabilitation and replacement, scheduling, staffing, equipment needs, budgeting and updating this and other emergency response plans.

The DPW office must report an SSO within 24 hours of the sewer overflow confirmation and provide the information by phone or email to the MassDEP, EPA and other

agencies. A written report is submitted within 5 days per MassDEP requirements. (See Appendix C for the Mass DEP - "Sanitary Sewer Overflow (SSO)/Bypass Notification Form and Instructions")

In addition, if the overflow may affect beach or swimming areas, or public drinking water intakes, the DPW shall notify the Local Board of Health, Department of Conservation and Recreation, and Drinking Water Resource managers by phone or email within 24 hours of becoming aware of the discharge and if the overflow results in a fish kill, the DPW shall also notify the MA Division of Marine Fisheries by phone or email within 24 hours of becoming aware of the results of the fish kill.

6.2 Reporting Details

- The dispatcher provides details on the time, location, description, and map locations of overflows
- The start time of the sewer overflow is determined 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 SCADA monitoring
 - c. Pump station and lift station flow charts and other recorded data. At major pump stations this information is available from the DPW SCADA System.
- The stop time of the sewer overflow is determined 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.
- An estimation of the rate of sewer overflow is made by one of the following criteria (See Appendix E for guidance on estimating sewer overflow volumes and flow rates):
 - a. Direct observations of the overflow; or measurement of actual overflow from the sewer main.
 - b. When the rate of overflow is known gallons per minute (GPM), the duration of the overflow is multiplied by the overflow rate; or when the rate of overflow is not known, the surrounding area is investigated for evidence of ponding or other indications of overflow volume.
- Visual observations should be recorded for any unusual observations
- Photographs and videotapes are taken at the event and response when possible.
- The nature and extent of any damage or impacts to public/private property are assessed.
- Repair crews provide a report indicating the time of the call, a description of the problem, the repair work done, personnel present and equipment used

Reports are kept in DPW Office filing system and evaluated to determine patterns and trends and to provide input to our asset management program.

6.3 Customer Satisfaction

The sewer response crew is responsible for confirming the overflow and the Deputy DPW Director 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.

In the event of a longer term emergency response, the following table indicates who will be responsible for communicating with the public and the media:

Designated spokesperson and alternates

Spokesperson	Alternate 1	Alternate 2
Town Administrator DPW Director	Jim Mckay Deputy DPW Director	Appointed Selectman

APPENDIX B: Millis Sanitary Sewer Pump Station/Collection System Overflow Questionnaire

**SANITARY SEWER OVERFLOW QUESTIONNAIRE
FOR
MILLIS SANITARY SEWER PUMP STATION/COLLECTION SYSTEM**

1. Location of overflow: _____
2. Who notified Millis DPW? _____
3. Time and date of above notification _____
4. Date overflow started: _____ Time overflow started: _____
5. Date overflow ended: _____ Time overflow ended: _____
6. Cause of failure: _____

7. Amount of overflow: _____
8. Was overflow treated with emergency chlorination? _____
Time chlorination started: _____ Amount of chlorine used: _____
9. What waterbody did the overflow discharge to? _____
10. Detail chronology of events leading to failure/overflow: _____

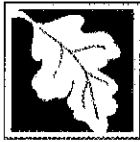
11. Detail chronology of response indicating all steps taken to minimize the amount of overflow: _____

12. If applicable, were septage haulers and/or emergency generators used to minimize the amount bypassed? (If use was possible but not implemented, why not?) _____

13. What actions are being taken to mitigate and/or prevent further occurrences? _____

14. Notification of Millis DPW (during business hours #: 376-5424; 24-hour emergency #: 508-376-5112)
Person Notified _____
Date/Time: _____

APPENDIX C: MassDEP – Sanitary Sewer Overflow (SSO)/Bypass Notification Form and Instructions



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Wastewater Management Program

**Sanitary Sewer Overflow(SSO)/Bypass
Notification Form**

Instructions

Who must notify DEP about an overflow or bypass, and when?

Any owner or operator of the following facilities:

- Municipal, state, federal, regional, industrial or other private wastewater collection system;
- Wastewater utility;
- Wastewater treatment works;
- Facility with a groundwater discharge permit;
- Facility with a surface water discharge permit.

This requirement includes any owner or operator of a satellite municipal collection system or other collection system that is part of a larger POTW not under the same ownership and control.

The following situations require notification to DEP and submittal of the SSO Report Form:

- An un-permitted overflow or bypass;
- Backup of wastewater into public or private property when the event is caused by a condition of the system owned and operated by the sewer authority
- In a combined sewer system, an overflow or bypass during dry weather conditions or at a location not covered by a NPDES permit, or from a portion of the system that has a separate sanitary sewer.

Backups of wastewater into a property which are not caused by conditions in the system owned and operated by the sewer system are not required to be reported. These incidents normally occur due to blockages in service connections to a property or blockages in the internal plumbing system.

What are the procedures for reporting?

Step One:

Immediate Telephone and/or email notification to MassDEP, EPA, and other parties:

Notification to MassDEP and other regulatory authorities is a critical element of the SSO response plan. Notification must be made as soon as possible, and no later than 24 hours after discovery of the event. The agency notifications should include all responsible officials whose duties include management of resources which may be affected by the SSO discharge. A list of agencies, contact staff, phone numbers, and emails should be kept by the Sewer Authority and posted for easy access to responsible staff. A list of some relevant agencies follows:

Agency:	Contact	Requirements
MassDEP	During business hours: Northeast Region: (978) 694-3215 Central Region: (508) 792-7650 Southeast Region:	Report all SSO events to relevant regional office Report SSO's to emergency line during non-business hours



Sanitary Sewer Overflow(SSO)/Bypass Notification Form

Instructions

	(508) 946-2750 Western Region: (413) 784-1100 24-hour Emergency Line: 1-888-304-1133 If you are not sure which Massachusetts DEP Regional Office oversees your facility, go to http://www.mass.gov/eea/agencies/massdep/about/contacts/ .	
EPA	EPA New England: (617) 918-1870	Report all SSO events
Local Board of Health	List of local BOH contact information available at http://www.mhoa.com/boh-roster/	Report all SSO events to local BOH(s) where impacts may occur
Department of Conservation and Recreation	State House Ranger Base 617-722-1188	Where DCR beaches or parks affected
MA Division of Marine Fisheries	Boston/Northeast: 617-727-3336 x 165 Southeast: 508-563-1779 x 122	Where shellfish resources may be affected
Drinking Water Resource Managers	List of Drinking Water Supply contacts available at http://www.mass.gov/eea/docs/dep/about/organization/pwscont.pdf	Where Drinking Water Resources may be affected

Hazardous Material Releases: If you believe an overflow, bypass, or any other discharge may have resulted in an oil or hazardous material release, report it to DEP at any time, 24 hours a day, at this toll free number: 1-888-304-1133.

MassDEP may require, on a case-by-case basis, more extensive reporting of the SSO event where determined necessary to protect users of resources affected by SSO discharges.

Step Two:

Submit a written report to DEP within five (5) calendar days of the time you become aware of the overflow, bypass or backup. DEP requires the use of the MassDEP Sanitary Sewer Overflow (SSO)/Bypass notification form, unless an alternative reporting form is authorized by MassDEP in writing.

The Notification form should be fully completed, and shall include a clear description of the overflow, or bypass and its causes, including the best approximation of the dates and times, and if the situation has not been corrected, the amount of time the overflow/bypass is expected to continue, and a description of the measures to be implemented to stop the discharge. The Form or attachments must also include steps taken or planned to reduce, eliminate, and prevent recurrence.



Sanitary Sewer Overflow(SSO)/Bypass Notification Form

Instructions

If you have a discharge permit, check the Monitoring and Reporting Section of your permit to determine if your *Notification Form* should be sent to the attention of DEP's regional Bureau of Waste Prevention (industrial facilities) or the regional Bureau of Resource Protection (nonindustrial facilities). All municipal facilities shall submit their reports to the Bureau of Resource Protection.

Fax the *Notification Form* to the attention of the Bureau of Resource Protection in your DEP regional office:

- Massachusetts Department of Environmental Protection, Northeast Regional Office, 205B Lowell Street, Wilmington, MA 01887. Fax: 978-694-3499.
- Massachusetts Department of Environmental Protection, Central Regional Office, 8 New Bond Street, Worcester, MA 01606. Fax: 508-792-7621.
- Massachusetts Department of Environmental Protection, Southeast Regional Office, 20 Riverside Drive, Lakeville, MA 02347. Fax: 508-947-6557.
- Massachusetts Department of Environmental Protection, Western Regional Office, 436 Dwight Street, Springfield, MA 01103. Fax: 413-784-1149.
- U.S. Environmental Protection Agency, Water Technical Unit (OES 04-4), 5 Post Office Square – Suite 100, Boston, MA 02109-3912 Fax: 617-918-0870

What should I do if I'm not sure of the information I am providing?

For required items such as time of occurrence, causes of incident, volume of overflow, etc., PROVIDE YOUR BEST ESTIMATE OR ASSESSMENT AT THE TIME OF THIS REPORT. You can submit any additions or corrections later.

What is the best way to report the exact location of the overflow, or bypass?

Include with your *Notification Form* a copy of a map indicating its location. Please use 8 ½ " by 11" paper at an appropriate scale between 1:5000 to 1:25000. Specifying the geographic location will help DEP determine the public health and water quality impacts associated with overflows and bypasses.

Why do I need to report backups into buildings?

DEP wants to ensure that sewage backups into buildings as a result of problems in the sewer system are properly repaired and measures are put in place to reduce the likelihood of recurrence. Owner/operators of sewer systems that caused a backup may need to repair, rehabilitate, or upgrade the hydraulic capacity of their system, or change their operations and maintenance procedures.

Are there some overflows or Bypass that are not subject to these reporting requirements?

DO NOT use the *Sanitary Sewer Overflow(SSO)/Bypass Notification Form* in the following situations:

- The overflow is from a properly permitted Combined Sewer Overflow structure. Follow the reporting requirements in your NPDES Permit.
- You are reporting an overflow or bypass of sewage for a collection system or treatment works that is not under your ownership and control. However, please assist DEP by immediately reporting to the appropriate DEP Regional Office by phone or fax any overflows or bypass incidences for facilities other than your own which involve a discharge of wastewater to the environment.



Sanitary Sewer Overflow(SSO)/Bypass Notification Form

Instructions

What are the state regulations that apply to this notification? Where can I get copies?

These regulations include, but are not limited to:

- Surface Water Discharge Regulations, 314 CMR 3.00
- Groundwater Discharge Regulations, 314 CMR 5.00
- Sewer Connection Regulations, 314 CMR 7.00
- Operation and Maintenance Regulations, 314 CMR 12.00

Official copies of the regulations may be purchased at:

State Bookstore
State House, Room 116
Boston, MA 02133
617-727-2834

State Bookstore
436 Dwight Street
Springfield, MA 01103
413-784-1376



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program
**Sanitary Sewer Overflow (SSO)/Bypass
Notification Form**

FOR DEP USE ONLY

Tax Identification Number _____

A. Reporting Facility

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



1. Facility Information

Reporting Sewer Authority _____

Permit # _____

2. Authorized Representative Transmitting Form:

First Name _____

Last Name _____

Telephone No. _____

Title _____

E-mail Address _____

B. Phone Notifications:

See DEP Regional Office telephone and fax numbers at the end of this form.

1. **MassDEP staff** contacted:

first name _____

last name _____

Date/Time contacted:

Date _____

Time _____

☐ am

☐ pm

2. **EPA staff** contacted:

first name _____

last name _____

Date/Time EPA contacted:

Date _____

Time _____

☐ am

☐ pm

3. Board of Health contacted:

First Name _____

Last Name _____

Date/Time contacted:

Date _____

Time _____

☐ am

☐ pm

4. Others notified (select all that apply);

☐ Conservation Commission

☐ Harbormaster

☐ Shellfish Warden

☐ Division of Marine Fisheries

☐ Downstream Drinking Water Supplier

☐ Watershed Association

☐ Beach Resource Manager ☐ Other: _____

(specify)

C. SSO Information

1. SSO Discovered:

Date _____

Time _____

☐ am

☐ pm

By: _____

2. SSO Stopped:

Date _____

Time _____

☐ am

☐ pm

3. SSO Discharge from: ☐ Sanitary Sewer Manhole ☐ Pump Station

☐ Backup into Property ☐ Other: _____

(specify)

4. SSO Discharge to: ☐ Ground Surface (no release to surface water)

☐ Direct to Receiving Water

(surface water)

☐ Catch basin to Receiving Water

(surface water)

☐ Backup into Property Basement



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program
Sanitary Sewer Overflow (SSO)/Bypass
Notification Form

FOR DEP USE ONLY

Tax Identification Number _____

C. SSO Information (cont.)

Location: _____
(Description of discharge site or closest address)

5. Estimated SSO Volume at time of this Report: _____

Method of Estimating Volume: _____

6. Cause of SSO Event:

- ☐ Rain Event ☐ Pump Station Failure ☐ Insufficient Capacity in System
☐ Treatment Unit failure
☐ Sewer System Blockage: ☐ Pipe Collapse ☐ Root Intrusion ☐ Grease Blockage
☐ Other: _____
(Specify)

7. Corrective Actions Taken:

Impact Area cleaned and/or disinfected: ☐ Yes ☐ No

Corrective Actions Completed: ☐ Yes ☐ No

D. Comments/Attachments/Follow-up

I wish to provide (select all that apply):

- ☐ Attachment ☐ Additional comments below: ☐ No additional comments or attachments

Additional comments and planned actions:



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Watershed Permitting Program
Sanitary Sewer Overflow (SSO)/Bypass
Notification Form

FOR DEP USE ONLY

Tax Identification Number _____

E. Certification Statement

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

Signature of Authorized Representative

Date Signed

Please keep a copy of this report for your records. When submitting additional information, include the MassDEP Incident Number from this report.

MassDEP Regional Office and EPA Telephone and Fax Numbers:

Northeast Region	Phone: 978-694-3215	Fax: 978-694-3499
Southeast Region	Phone: 508-946-2750	Fax: 508-947-6557
Central Region	Phone: 508-792-7650	Fax: 508-792-7621
Western Region	Phone: 413-784-1100	Fax: 413-784-1149
EPA Contact	Phone: 617-918-1870	Fax: 617-918-0870
DEP 24-hour emergency	Phone: 888-304-1133	