Milwaukee County

Capacity, Management, Operations, and Maintenance
CMOM Program
Overflow Response Plan

Prepared by

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1.0 Introduction to the Overflow Response Plan

The overflow response plan (ORP) provides documentation of the methods that are and will be used to ensure that the District is aware of, responds to, and provides notification of all overflows of sewage from Milwaukee County facilities.

Overflow Emergency Response Plan principles were proposed by the United States Environmental Protection Agency (USEPA) as a part of the draft Sanitary Sewer Overflow (SSO) rule that was subsequently withdrawn. The withdrawn SSO rule, although never formally adopted, was considered, in the absence of other guidance, in developing the ORP. However, the Stipulation requirements and Capacity, Management, Operation, and Maintenance (CMOM) Program Objectives were the primary considerations.

The activities described in this Plan will be subject to change and refinement as the County continues implementing and gains experience with the CMOM Program.

Historically, Milwaukee County has not reported SSOs from its system and staff is not aware of unreported overflows. As a result, Milwaukee County does not appear to have operating strategies or documents that meet the intent of the draft CMOM regulations. Therefore, this CMOM-based ORP for Milwaukee County brings such documents in a single plan, available for review by regulatory staff and the public.

1.1. Regulatory Objectives

The objectives of an ORP, according to the draft CMOM regulations, are as follows:

1. Reducing sewer system overflow frequencies and volumes.
2. Protecting public health and safety.
3. Minimizing adverse water quality and other environmental impacts due to an overflow.
4. Avoiding WPDES permit violations.
5. Complying with all local, state, and federal rules and regulations.
6. Protecting public and private property.
7. Minimizing the liability of the collection system owner.
8. Improving the quality of customer service.

2.0 Overflow Identification

A sanitary sewer overflow (SSO) is a condition whereby untreated sewage is discharged into the environment prior to reaching treatment facilities thereby escaping wastewater treatment. Since Milwaukee County has no constructed sanitary sewer or combined sewer outfalls, any overflows that would occur would be from surcharge manholes overflowing to the ground surface.

If the overflow is contained, the sewage needs to be properly disposed in a sanitary sewer and the area cleaned up. If the sewage is pumped, it needs to be pumped to a sanitary sewer.

If the sewage escapes the area and makes its way to a storm sewer system, or if the sewage is pumped to a storm sewer system, that is a reportable overflow and needs to be responded to and documented as outlined in this report.

3.0 Overflow Response

The response to a possible overflow includes three parts:

1. Receive and document the information and direct it to the proper personnel.
2. Respond to the possible overflow.
3. Complete an analysis of the overflow.

Each of these is discussed below.

3.1. Information Receipt

Sanitary sewer overflows are reported to the plumbing supervisor in each individual department. The following information is collected from the caller:

• Location and other information enabling a field crew to quickly locate the problem

• Description/Observations (e.g. water flowing out of pipe, bubbling out of manhole)

• Date and time of observation, date and time of call

• Caller's name and phone number (for providing feedback)

3.2. Response Procedures

After the information regarding a possible overflow is received, the plumbing supervisor or his staff investigates the overflow according to the procedure listed in Figure 3 found at the end of this ORP.

3.3. Overflow Response Review

Following the overflow event, Milwaukee County should conduct a debriefing meeting to review the response. The purpose of this meeting is to review the response, identify aspects of the response that went well, problems that arose, and to identify future action all parties should take to improve the response. Questions that the County should address at the meeting include the following:

What lessons were learned from this overflow event?
Are additional supplies needed?
Are any staffing changes needed?
Are changes needed to the ORP procedure?

After responding to an overflow, it is important to record data about the overflow and the response. A standardized internal debriefing summary form will help record the information and the County should keep the form on file. Figure 2 (found at the end of this ORP) shows standard county Incident Report. This report should be completed and submitted to the Environmental Compliance Manager, who will file in the blue incident report binder in the Environmental library on the 2nd floor of City Campus.. Subsequently, staff should conduct an RCFA as described below. MMSD generates a substantial amount of information that may be helpful to the County for overflow event evaluation.

3.4. Overflow Analysis

A review may be done to determine if conditions warrant a detailed analysis of the overflow. The main issues reviewed are:

1) Is there a pending project to address any known problems in the area?

2) Is this a recurring overflow?

If there is a project pending, the analysis will focus on whether the proposed project would have eliminated the overflow. If there is not, the analysis will focus on identifying all details of the cause of the overflow and possible solutions.

The analysis, generally termed a root cause of failure analysis (RCFA), is used for overflows, possible overflows, failures and other unusual events. The analysis includes an evaluation of the overflow, system, precipitation, operations and maintenance details with the ultimate objective of preventing similar failures.

The main elements of a RCFA are as follows:

1. Locating and preserving failure data (such as duration and extent of overflow; monitored indicators, such as rainfall data, flow data, and water quality data; time of last facility inspection; and information on previous failures at the specific location).
2. Assembling a RCFA committee to analyze data and develop hypotheses for cause of failure.
3. Verifying hypotheses. The RCFA committee may verify a hypothesis by simply establishing consensus that existing data confirm a particular hypothesis. Alternatively, the RCFA may recommend methods requiring further effort, such as hydraulic modeling, for testing a hypothesis.
4. Determine underlying cause of failure (physical, mechanical, human).

5. Communicate and document RCFA results to management and/or regulating agencies, along with recommended strategies for preventing similar failures in the future.

As a result of the RCFA, the County may need to perform abatement activities to prevent the recurrence of the overflow. The nature of the overflow determines what the immediate and long-term abatement activities are, if any. Short-term steps may be as simple as jetting the sewer pipe to clean out a grease build-up, or as involved as re-routing the flow of sewage over the course of a few days in order to repair a pipe.

Long-term abatement activities imply some type of preventive maintenance (PM) on the pipeline. PM includes cleaning grease build-up from the sewers, I/I removal, clearing out tree roots, or inspecting sewers with a remote sewer camera. The County has a PM program for maintaining problem pipelines and manholes. The County should routinely review and update the list of pipes included in this program.

Milwaukee County can use this information to direct overflow correction activities and prioritize maintenance activities.

4.0 Overflow Notification

The County has not experienced any reportable sanitary sewer overflows in recent history. Facility managers and staff plumbers would handle notification of a sanitary sewer overflow in the same manner that it would handle a petroleum, chemical, or other type of spill by reporting it to the county Environmental Compliance Manager. Figure 1 found at the end of this ORP shows a flow chart of the existing notification procedures for spills, accidental discharges, and unidentified releases to the County's collection system. The Environmental Compliance Manager would notify the Public Works Director, Risk Management, County Executive's office, County Supervisor's office, MMSD, WDNR, affected municipalities, and public health officials of the incident.

4.1. Public Notification

Public notification is a key component of the communication plan, and a requirement under the new WDNR general discharge permit, effective March 1, 2006. Also, the draft CMOM regulations require "notification to parties with a reasonable potential for exposure to pollutants associated with the overflow event." SSOs can include bacteria, viruses, toxic constituents, and metals. While bacteria may die within hours to days following an overflow event, viruses and toxic compounds can persist in sediments for months after the discharge. Public health concerns arise in areas where humans, animals, or fish come in contact with overflows.

Public notification often includes an overflow signage component. At this time, the County does not intend to implement a signage program for SSO events as none have been experienced in the past.

Other methods of notifying the public of overflows include media advisories following SSO events, web pages, regular newsletters, and hotline (recorded messages) programs. Milwaukee County intends to use a media advisory and web site updates to notify the public.

4.2. Permit Required Notification

State regulations view scheduled (typically related to construction) and unscheduled overflows differently. The County must report unscheduled overflow occurrences to the WDNR according to the newly reissued General Permit WI-0047341-04-0 (effective March 1, 2006) for bypasses and overflows from sewage collection systems. Reporting procedures and requirements for SSO include the following:

- Within 24 hours of overflow initiation, contact (fax, voicemail, e-mail) WDNR's Southeast Regional Office.
- Within 24 hours of a ¾-inch 24-hour precipitation event, each permanently installed overflow structure must be inspected to look for evidence of an SSO.
- Within 5 days of conclusion of the SSO event, submit a written report to WDNR's Southeast Regional Office. See required report information below in Section A.
- An annual report is required to summarize the status of the collection system and any SSOs that occurred during the year. See required report information below in Section B.
- If the SSO potentially impacts a drinking water intake in Lake Michigan, the county must notify the owner of the intake as soon as possible.
- If monitoring determines that certain types of permit non-compliance events have occurred, then a phone call shall be made within 24 hours after becoming aware of the noncompliance to WDNR's Southeast Regional Office, followed by a written report submitted within 5 days. These procedures are discussed below.

4.2.1 Requirements for 5-day written reports:

The 5- day written report should include the following information:

- Reason the SSO occurred, or explanation of other contributing circumstances that resulted in the overflow event. If the SSO is associated with wet weather, provide data on the amount and duration of the rainfall or snow melt for each separate event.
- Date the SSO occurred.
- Location where the SSO occurred.
- Duration of the SSO and estimated wastewater volume discharged.
- Steps taken or the proposed corrective action planned to prevent similar future occurrences.
- Any other relevant information.

4.2.2 Requirements for annual reports:

A Compliance Maintenance Annual Report (CMAR) is required to be submitted on-line and includes a County Board Resolution. The CMAR describes wastewater management activities, physical conditions, as well as inspection of infrastructure that has occurred during the year. Information included in the CMAR can be found in NR 208.04(5) of the Wisconsin Administrative Code. Each section of the report is assigned a point score and grade based on information and data collected during the year. The scores are used to determine the applicable grade and response action as outlined in NR 208.05(2).

4.2.3 Noncompliance Notification Requirements:

The following types of noncompliance shall be reported by a telephone call to WDNR's Southeast Regional Office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger public health or the environment;
- any violation of an effluent limitation resulting from an unanticipated bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by WDNR in the WPDES permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the WDNR's Southeast Regional Office within 5 days after the county becomes aware of the noncompliance. On a case-by-case basis, the WDNR may waive the requirement for submittal of a written report within 5 days and instruct the county to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

5.0 Critical Facilities Identification

A critical facility is any structure or component of the collection system that could allow an overflow that would result in significant impact to public health or the environment.

5.1. Pumping Stations

Two types of pumping stations covered by this definition are conventional and bypass pumping stations. The county has 22 conventional pumping stations and no bypass pumping stations.

Mechanical, instrumentation, power, and structural failures at a pumping station can result in basement flooding, surcharged manholes, and overflows of untreated wastewater that may directly impact public health and receiving water quality. Table 1 lists of all county sanitary pumping stations:

Table 1. Sanitary Pumping Stations

Location	Tributary to Structure	Indoor/ Outdoor
Zoo - Dall Sheep Exhibit	MH-72	Outdoor
Doctors Park	MH-01	Outdoor
Dretzka Park	MH-11	Outdoor
McKinley Park	MH-01	Outdoor
McKinley Park	MH-09	Outdoor
McKinley Park	MH-11	Outdoor
Dineen Park	MH-05	Outdoor
Brown Deer Clubhouse	LS1	Indoor
Lincoln Park old pool	MH-22	Outdoor
Oakwood Park	MH-03	Outdoor
Mitchell Park	MH-16	Outdoor
South Shore Fish Cleaning Bldg	LS2	Outdoor
South Shore Yacht Club	LS1	Outdoor
South Shore Pavilion	LS3	Indoor
Bender Park	LS1	Outdoor
Grant Beach (LS Bldg)	MH-29	Indoor
Cupertino Park Comfort Bldg	LS1	Indoor
Oak Creek (Mill Pond) Skate	LS1	Indoor
Whitnall Park Area 8 Picnic Shelter	LS1	Indoor
Whitnall / Boerner Visitor Center	LS2	Indoor
GMIA - NE Corner (LS Bldg)	270212	Indoor
GMIA - Along College Ave.	330302	Indoor

5.2. Pipes

The collection system collects and conveys the wastewater from domestic, commercial, and industrial sources to a WWTP.

Collection system deficiencies such as plugged lines, grease build up, root intrusion, flat slopes, collapsed pipe, and other hydraulic inefficiencies can cause wastewater backups, resulting in untreated wastewater discharges which can produce adverse public health and environmental impacts. The County owns approximately 38 miles of sanitary sewer collection system lateral and mains. The most critical elements of the gravity system are manholes and pipes at elevations very close to those of nearby basements.

6.0 Organizational Structure

Each department with sanitary sewer infrastructure is responsible for the maintenance and operation of their own sanitary sewers, manholes, pump stations, and force mains.

6.1. Staffing

Table 2 lists staff in each department that is responsible for sanitary sewer infrastructure and operation. These staff would also be most likely to indentify, respond to, and report any sanitary sewer overflows.

Table 2. Departmental Staffing

Department	Name & Title	Phone Numbers	Licensing Qualifications Years of Experience
Parks	Gene Andrzejak Maintenance Manager	258-2322 640-2204	
	Gary Pitroski Plumbing Supervisor	258-2322 531-1193	Master Plumber Confined Space Entry 15 years
County Grounds	Dave Schaning Facilities Manager	278-5009	
	Tom Travia Plumbing Supervisor	339-0017 339-0408	
Airports	Tim Kipp Civil Engineer	747-5716	
	Chris Lukas Maintenance Manager	747-5535	
Zoo	Karl Hackbarth Operations Coordinator	421-3568	
	Tim McFaul Plumbing Supervisor	327-7248	Master Plumber Confined Space Entry
House of Corrections	Shawn Sullivan Maintenance Supervisor	427-4717	
	Douglas Urban Plumbing Supervisor	427-4760 852-3943	Master Plumber Inspector Certs 14 years
Transit	Dave Schwert Bldg & Gnds Manager	937-3237	
Highways	Chuck Smeltzer Maintenance Manager	257-6580	
Transportation and Public Works	Kevin O'Brien Env. Compliance Mana.	278-4832 550-1077	Certified Hazardous Materials Manager
	Jill Organ Civil Engineer	278-4819 333-7578	Professional Engineer 20 years
	Mark Sifuentes Civil Engineer	278-5138 651-4967	

Training will include classroom sessions to review the ORP contents, conduct desktop training exercises for determining root causes of an overflow, and reviewing responsibilities for reporting SSOs to appropriate authorities. Field training may be included if resources allow.

6.2. Outside and Specialized Contractors

The County has several outside contractors that can help us respond to sanitary sewer overflow events. The list of Time and Material Contractors typically includes the following:

Visu-Sewer
W230 N4855 Betker Drive
Pewaukee, WI 53072
1-800-876-8478

Grunau Company
1100 West Anderson Court
Oak Creek, WI 53154
216-6978

Roto-Rooter
11030 W. Lincoln Ave.
West Allis, WI 53227
541-4477

Milwaukee Plumbing
11200 W. Greenfield Ave.
West Allis, WI 53214
414/257-9000

Kon's Septic
N112 W14545 Mequon Rd.
Germantown, WI 53022
(262) 251-1704

Roy' Plumbing
1830 W. Hampton Ave.
Milwaukee, WI 53209

6.3. Local Municipalities

The Local municipalities could make staff and equipment available for responding to a large overflow. These municipalities and their contact information are as follows:

Bayside	414-351-8800
Brookfield	262-782-0199
Brown Deer	414-357-0120
	414-371-2900
Butler	262-783-2525
Caledonia	262-835-7765
	262-835-4423
Cudahy	414-769-2216
	414-769-2260
Elm Grove	262-782-6700
	262-786-4141
Fox Point	414-351-8900
	414-351-8914
Franklin	414-421-2613
	414-425-2522
Germantown	262-250-4721
	262-253-7780
Glendale	414-228-1710
	414-228-1753
Greendale	414-423-2133
	414-423-2121
Greenfield	414-761-5374
	414-761-5300
Hales Corners	414-529-6161
Menomonee Falls	262-532-4700
Mequon	262-236-2913
Milwaukee	414-286-8282
MMSD	414-225-7200
Muskego	262-679-4128
	262-679-4130
New Berlin	262-786-7086
	262-782-6640
Oak Creek	414-768-7060
River Hills	414-352-0080
	414-247-2300
St. Francis	414-481-2300
	414-481-2232
Shorewood	414-847-2650
	414-847-2610
Thiensville	262-242-3720
	262-242-2100
Wauwatosa	414-471-8422
West Allis	414-302-8800
	414-302-8000
West Milwaukee	414-645-6238
	414-645-2151
Whitefish Bay	414-962-6690

6.4. Equipment

Table 3 lists of portable equipment available from each department to successfully carry out an overflow response action:

Table 3. Portable Overflow Response Equipment

Equipment	Location	Contact Person & Phone Number	Age
Confined space trailer	Park Maintenance	Gary Pitroski 258-2322 531-1193	10 years Good working order
Ditch Pump	Park Maintenance	Gary Pitroski 258-2322 531-1193	3 years Good working order
Vacuum Truck	Zoo	Karl Hackbarth 421-3568	2006
	104th & Watertown Plank		
Small Pumps	Zoo Plumbing Shop	Karl Hackbarth 421-3568	
Sewer Cleaning Equipment	House of Corrections	Douglas Urban 427-4760 852-3943	6 years

7.0 Maintenance and Distribution of the ORP

Milwaukee County will review and update, as necessary, the ORP to reflect all changes in the system, policies, and procedures in order to achieve the ORP's objectives. The County will distribute the updated ORP to all personnel who have duties and responsibilities under the ORP.

7.1. Review and Update of ORP

Milwaukee County will review the ORP annually and amend it as appropriate. In particular, the County's CMOM Engineer position with the Public Works Department, A&E Division, who has primary responsibility for the CMOM Program will:

- Update the ORP with the issuance of a revised or new WPDES permit
- Conduct annual training sessions with appropriate personnel
- Review and update, as needed:
    - Staffing
    - Organizational Charts
    - Outside and Specialized Contractors List
    - Equipment Inventory

7.2. Distribution of ORP

Milwaukee County should distribute copies of the ORP and any amendments to the following organizations/functional positions:

- Wisconsin Department of Natural Resources (WDNR)
- County
    - Architecture & Engineering
    - Departments:
        - Parks
        - Zoo
        - County Grounds
        - House of Corrections
        - Airports
        - Transit
- MMSD Wisconsin Department of Natural Resources (WDNR)

All other personnel who may become incidentally involved in responding to overflows should be familiar with the ORP. Additionally, Milwaukee County should laminate and distribute copies of the appropriate ORP procedures and contact information to all sewer crews or have them available for contractors and place them in the County vehicles for reference during an overflow event.

8.0 Performance Measures

There are two considerations for establishing performance measures for the ORP:

1. effectiveness of the overflow response
2. annual review of the ORP

Both are important as several years may pass between SSO events, making an annual review of the ORP important for ensuring operational readiness.

Once the County has completed the ORP and trained staff on its use, the primary measurement parameters will consider the effective implementation of the ORP procedures during an overflow event. Also, as the ORP is a living document, Milwaukee County should review and update it annually to reflect changes in staff, procedures, and general information. The annual review of the ORP will be conducted by the County's CMOM Engineer position with the Public Works Department, A&E Division with input from the staff.

The County will need an evaluation process for the performance measures in order to determine if the implementation of the ORP is successful. Table 4 organizes six performance measures into topic areas related to the ORP.

Table 4. Performance Measures for Overflow Response

Topic	Performance Measure
1. ORP Notifications	Were the proper personnel and agencies notified?
2. Availability of Staff and Equipment	Were the necessary staff and equipment available? Were the responding crews sufficiently qualified to perform the necessary tasks? Was the equipment in proper working order?
3. Response Time and Efficiency	How quickly were the crews dispatched to the overflow area? How quickly were they able to contain, control, and mitigate the overflow?
4. Overflow Response Procedures	Were the ORPs followed by the responding staff? Were the ORPs adequate technically to contain, control, and mitigate the overflow? Were water quality samples obtained? Were overflow-specific samples taken?
5. Root Cause of Failure Analysis	Were adequate data available to determine the root cause of failure? Was the RCFA committee adequately staffed to quickly evaluate the failure? Was the underlying cause of failure determined? Were conclusions and strategies for action communicated according to the RCFA policy?
6. Annual ORP Reviews and Updates	Has County updated the communications plan to reflect changes in staff and contact information? Has County reviewed and updated the equipment inventory? Has County documented any changes in the response procedures?

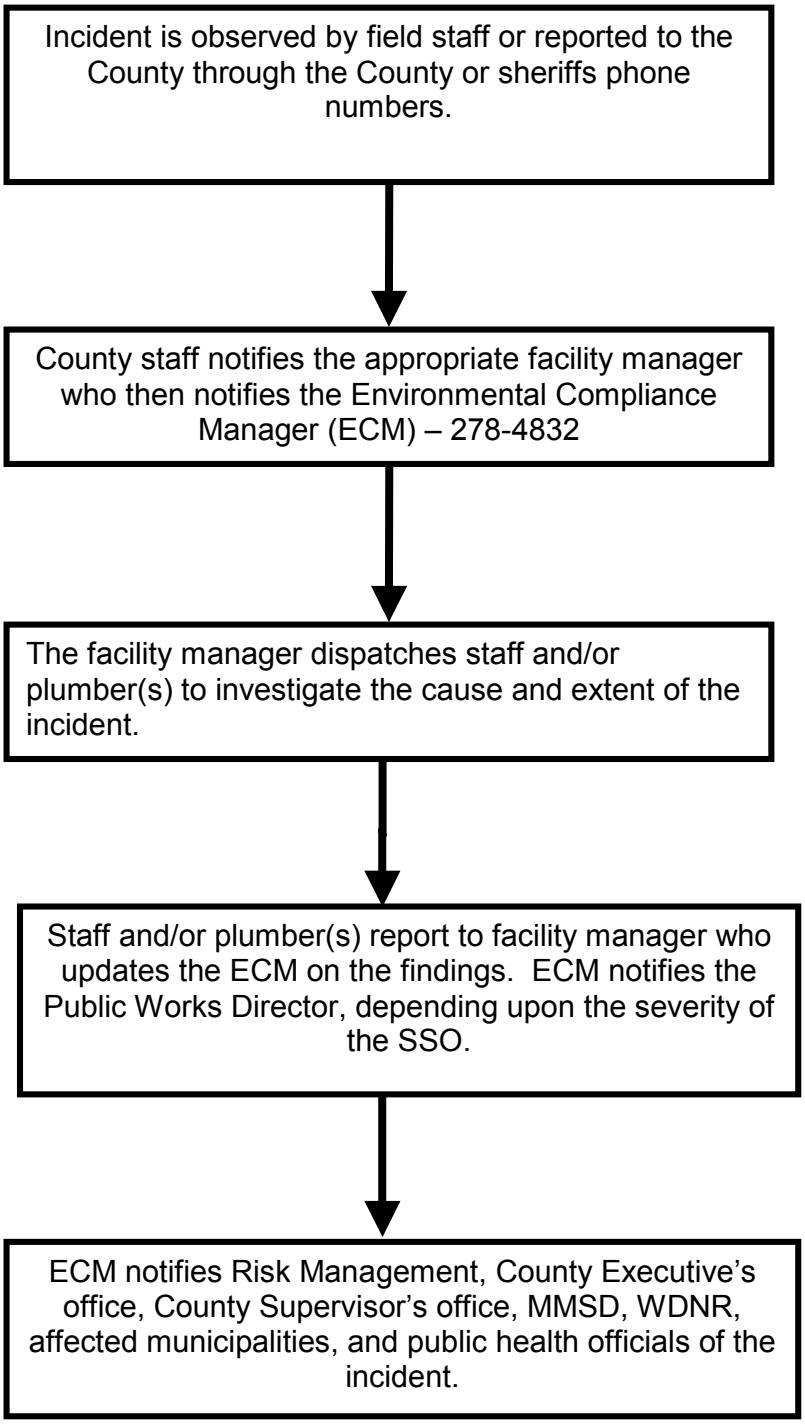

Figure 1. Existing Response Procedures in Event of an Overflow

INCIDENT REPORT - ENVIRONMENTAL SERVICES DIVISION

☐ **ASBESTOS** ☐ **AIR QUALITY** ☐ **WATER QUALITY** ☐ **ABANDONED BARRELS**

☐ **SOIL CONTAMINATION** ☐ **MISCELLANEOUS** ☐ **SANITARY SEWER OVERFLOW**

Date/Time _____ Reported By _____
[Name, Department, Phone Number]

Location _____

Weather _____

Public Access	Yes ☐	No ☐	N/A ☐
Actual Release	Yes ☐	No ☐	N/A ☐

Contacted:

Environmental Services	278-4874	Date_____	Time:_____
Public Works Administration	278-4846	Date:_____	Time:_____
Facilities Management, Courthouse	278-4971	Date:_____	Time:_____
Emergency Management	278-4709	Date:_____	Time:_____
Risk Management	278-4160	Date:_____	Time:_____

Brief description of incident:_____

Course of action:_____

Work being performed by whom:_____

Expected time of completion: _____

Name: _____ Signature: _____

KPO:gmp
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9/02

Figure 2. Incident Report – Environmental Services Division

CS-2 PROBLEM: *Overflowing Sewer Manhole Resulting from Surcharged Sanitary Sewer*

OVERFLOW RESPONSE PROCEDURES:

Survey the Scene

Look for any water on the street, sidewalk, grass, dirt, etc. After confirming that the visible water is likely to contain sewage, look for a receiving storm drain. Follow the path of the sewage overflow to find storm drain entry. Ask for assistance as needed. Take pictures.

Communicate Findings and Request for Assistance.

Contact the Public Works Department to request assistance for additional staff, equipment, and/ or other agencies. Report findings to start notification. Call in an additional crew to set up flotation booms across streams, brooks, etc., by-pass pumping as necessary.

Set-up of Traffic and Crowd Control

If needed, use cones, barricades, and vehicle(s) to block and divert traffic around the spill and workers. If the wastewater should jeopardize 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. If ponding should occur on the street or easement (public or private), cordon off the area.

Attempt Containment

Place rubber sheet at the entrance to storm drain. In some cases you may use two or more rubber sheets if you find that the storm drain entry is very wide.

Secure Containment in Place

Lay sand bags, sand, dirt, spill pillows or heavy objects at the corners of the rubber mat to keep it in place—thus, eliminating sewage leaks around the mat and for securing the two overlapping sheets of rubber. Take measurement for your "Field Spill Report."

Higher Velocity Spill Flow Downhill

Use absorbent booms/socks, dirt, or sand to build a dam or berm to slow down sewage flow. Install at/or before storm drain entry.

Divert Spill Back to Sewer Line

By building a small berm to change direction of flow back to downstream sewer manhole.

Constantly Monitor Diverted Spill

Watch for berm leaks and traffic. Keep public out of area.

Divert Spill

Divert spill by pumping out containment area and return sewage to sewer. This set-up requires power source (generator) and trash (sump pump) and the setting up of traffic control.

Postpone Recovery

Capture spill for later recovery by letting it collect in a natural low area. Recover sewage as soon as time permits.

Figure 3. Example of a Site Specific Overflow Response Procedure (Page 1 of 2)

Control Spill

Inspect the terrain configuration. Try to find the lowest area with concrete or asphalt base. (Example: empty parking lot surrounded by curbs).

Control: Relieve Stoppage

Inspect the downstream manholes until a dry manhole is found and then start jetting or rodding. See standard procedures for use of combination trucks, vactor trucks, and pumped bypass (emergency power).

Clean-up

Gather and remove debris and organic matter from the affected area. Remove as much of the contaminant as possible. Remove containment, clean catch basin, and clean channel and creek. Disinfect the ponding areas with an industry standard disinfectant and notify the surrounding homes.

Assess Damage to Public and Private Property

While the crew is restoring the site, the supervisor/inspector should conduct a preliminary assessment of damage to private and public property. The focus is to resolve the problem. The supervisor/inspector should use discretion if advising or assisting the homeowner. The supervisor/inspector should take appropriate still photographs and video footage, if possible, of the outdoor area of the sewer overflow and impacted area to thoroughly document the nature and extent of the impacts.

Complete Field Report

Create a field report including sketches of flow path, width, length, and depth. Indicate size and number of manholes, take pictures.

CS-2 Minimum Levels of Staffing (people): 2-3	
TOOLS AND EQUIPMENT	**SAFETY AND OTHER CAUTIONS**
• Jet flushing unit if available (sand trap) • Rodding machine & associated cleaning/cutting attachments (sand trap) • Standard disinfectants • Safety harness and lifeline if applicable • Air blower with hose • Power vacuum • Portable pumps • Portable generators • Safety cones/barricades • Tritector — for oxygen deficient, explosive or toxic gases • Confined space entry tripod and associated equipment	• TV camera unit • Truck with hoist • Vactor unit • Power saw (circular) • Pipe cutter (hydraulic) • Caution tape • Sand trap • Floatation booms, if necessary • Self Contained Breathing Apparatus (SCBA)

Figure 3. Example of a Site Specific Overflow Response Procedure (Page 2 of 2)