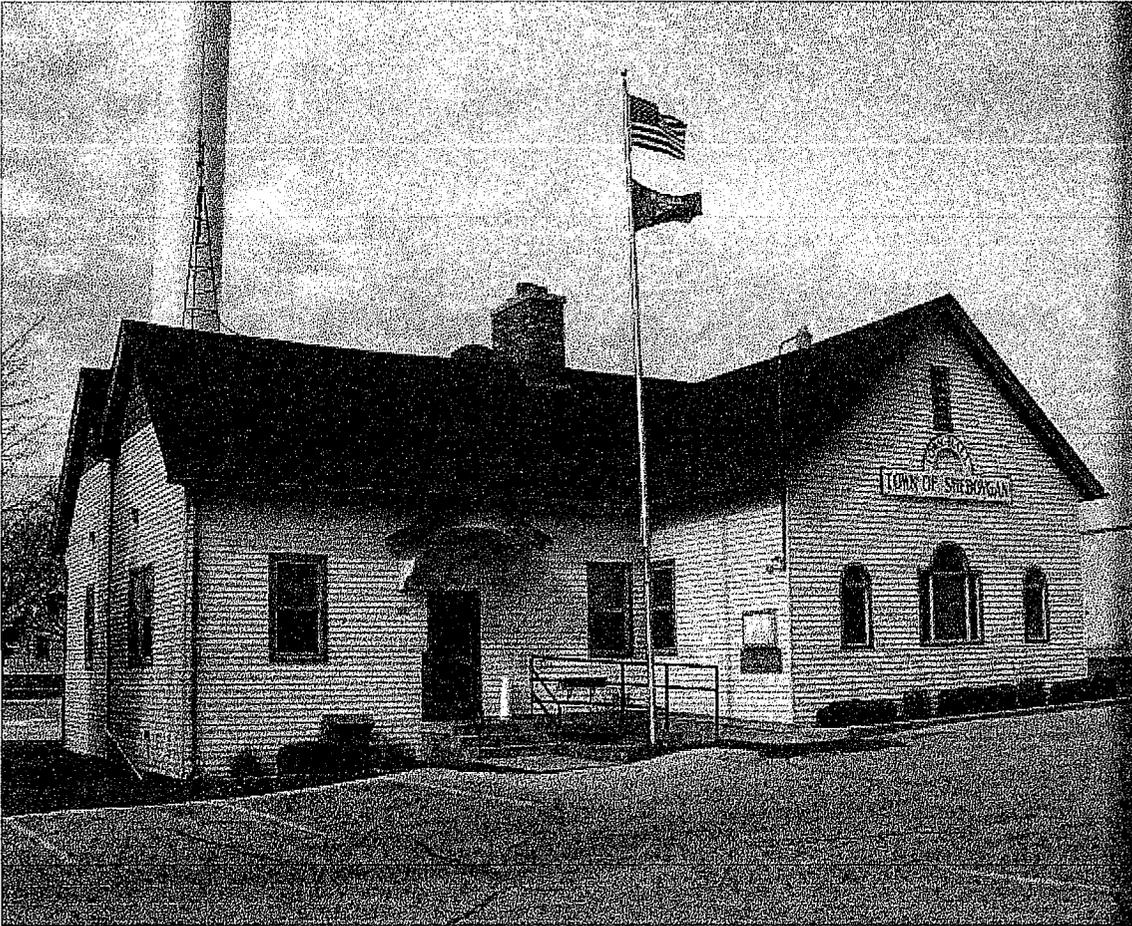


Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
(CMOM)



August 17, 2015

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan

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Attachments: Compliance Maintenance Annual Report

Wisconsin CMOM: Guidance Document PUB-WT-917-2009

CMOM In Wisconsin - Successful Operations Through Process Control
Jack Saltes, Wastewater Operations Engineer WDNR

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 1 Goals

Step 1 Set Your Goals

Collection system goals can be: investigative, rehabilitative, operational, construction related, budgetary or legal. Goals should be specific, realistic, and achievable. Goals should be measurable quantitatively, such as the tasks of cleaning a certain percentage of the collection system each year, or reducing the number of basement back-ups or sanitary sewer overflows from the previous year. At the end of each year, evaluate your progress at meeting your goals. Based on outcomes, set new goals for the next year.

Examples of Goals

CHECK THOSE THAT APPLY

- Review and update the Sewer Use Ordinance as needed
- Review and Establish Safety Procedures for your employees
- Create Informational Materials to Educate Your Users
- Implement a Grease Control Inspection Program
- Clean of the Collection System (or on a 6 year rotating schedule)
Cleaning and televising select sewers annually
- Identify Illegal Sump Pump Hookups
Sump pumps are inspected according to the Town of Sheboygan Clean Water Ordinance
- Locate Specific Areas of Blockages, Identify/Control Source
Based on televising schedule and specific complaints
- Design and Implement a Sewer Televising Schedule
Cleaning and televising select sewers annually
- Review Budget of Repair and Rehabilitation Projects
Budgets and repairs are based on needs identified during inspections and daily operations

Goals

Describe the Specific Goals for the Collection System

	Year	Status/Completion Date
<input checked="" type="checkbox"/>	2014	
<input checked="" type="checkbox"/>	Review and update the Sewer Use Ordinance	Started 8/2012
<input checked="" type="checkbox"/>	Clean <input type="text" value="15%"/> Percent of the Collection System	Fall 2014 Schedule

Observations and Comments

SCADA System upgrade for lift stations is in progress.
Create brochures to address flushable wipes and grease trap policies for restaurants, schools.

Town of Sheboygan
 Sanitary District No. 2 Sewer
 Capacity, Management, Operations & Maintenance Plan
 Step 2 Know Your Organization

Step 2 Know Your Organization

Organization is important to how the collection system is managed, operated and maintained. Decisions about capital projects and budgets come from the governing body of elected officials or owners of the collection system.

Successful implementation of the CMOM Program is directly related to the organization's structure and communications. Communications are vital to productivity and success of the CMOM.

Organization

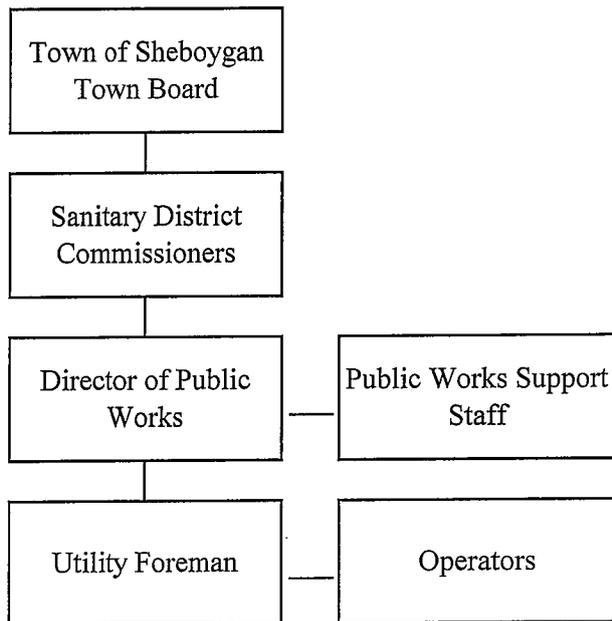
Description of Ownership and Governing Body

Present the ownership and governing body description in a narrative form describing the community, its governing body and committees that serve it. Discuss the governing body decision-making process as it pertains to the collection system. Discuss policies for laterals, easements and right-of-ways. See Section 1-16.

Organizational Chart

An organizational chart shows the teams and work interrelationships in the organization, especially the collection system workforce, managers, supervisors and committee chairs.

Town of Sheboygan Organization Chart 2015 - Collection Systems



Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 2 Know Your Organization

Town of Sheboygan Contact and Emergency Call List
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Town of Sheboygan Personnel

DPW	Bill Blashka	920-946-4939 Cell
	John Witters	920-946-7439 Cell
	Emergency Pager	920-458-6933

Sanitary District No. 2 Sewer Commissioners

President	Dave Griffin	920-892-2444
Treasurer	Ken Katte	920-452-9137
Secretary	Dave Albright	920-458-6933

Mutual Aid Contact

Sheboygan Wastewater Treatment Plan	920-459-3464
Kohler DPW	920-459-5668

Contractors	Service/Equipment	
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Advanced Disposal	Confined Space	920-459-2711
2905 Paine Ave, Sheboygan, W		

Albert's Hydrovac	Pumping & Hauling	920-980-3767/Russ Albert
N8662 Union Rd, Sheboygan, WI		

Diggers Hotline	Locates	800-242-8511
6577 Solution Center, Chicago, IL		811

Dixon Engineering		616-374-3221
1104 Third Ave, Lake Odessa, MI		

Energeneccs	Pumps/Electrical	262-377-6360
W59 N249 Cardinal Ave, Cedarburg, WI		800-343-6337

Great Lakes TV & Seal	Televising	920-863-3663
3600 Kewaunee Rd, Green Bay, WI		

Hawkins	Chemical Supplier	920-923-1850
1882 Morris St, Fond du Lac, WI		920-238-1101/Jeremy
Fax 920-923-0606		608-548-1055/Jamie Stezke

LA Equipment	System Repairs	920-207-3302
1006 Garton Rd, Sheboygan, WI		920-576-7844/Pager
		920-207-9861/Adam Launer

Wagner Excavating	System Repairs	920-458-9082
3437 Paine Ave, Sheboygan, WI		920-918-1004/Greg Wagner

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 2 Know Your Organization

Personnel and Position Descriptions

Position descriptions for each worker and manager should clearly define collection system work duties and tasks as well as communication responsibilities. Check that all work needs are covered and assigned appropriately.

Town Board

*Works with Commissioners in hiring and reviewing employees; work on joint projects. Oversee but leaves daily operations up to Commissioners, DPW and staff.

Commissioners

*At monthly meetings they approve all contracts, purchases, financial matters, hiring of staff, projects and everything pertaining to the daily operation of the system and staff.

Director of Public Works

*Oversees and schedules staff, reports, projects, purchases and makes daily operational decisions.

Utility Foreman

*Takes direction from DPW; assistant to DPW in daily field work; covers when DPW is on vacation.

Operators

*Responsible for daily operations of field work under the supervision and direction of the DPW and/or Utility Foreman.

Public Works Support Staff

*Responsible for daily office operations and payables, receivables, utility billing, finances; assists DPW in required yearly reports, minutes, agendas, recordkeeping.

Internal Communication Procedures

Written internal communication procedures should be known to all employees. Procedures should cover emergencies such as basement backups, sewage overflows, pump failures, electrical outages, worker accidents, as well as everyday operations and maintenance activities. A phone tree with both home and cell phone numbers should be in place to improve communications.

By reference see the Attached Town of Sheboygan Contact and Emergency Call List

- * Town of Sheboygan radio system
- * Cell phones

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 2 Know Your Organization

Public Information and Educational Programs

Because a collection system is a large community asset that is out-of-sight, out-of-mind, it is important to communicate the benefits of a CMOM Program to the public. This can be done through mailings, informational meetings and the community website as well as person-to-person contacts.

Identify actions that homeowners and businesses can take to extend the life of a collection system and the private laterals. Explain how your community communicates these ideas to the public.

- * Town of Sheboygan Newsletter
- * Annual Town Meeting (April of each year)
- * Special notification as needed. Example:
Example: Letter of notification to residents effected by sewer cleaning/maintenance
- * Sump Pump Inspection Program brochure available at Town Hall, elections & on website
- * Sewer rates available at Town Hall and website

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 3 Understand Your Legal Authority

Step 3 Understand Your Legal Authority

Adequate legal authority is the foundation of a successful CMOM Program. In order to operate and maintain the sewer system, you must have certain legal mechanisms in place. Legal Authority provides the utility with the ability to establish sewer service charges; to regulate and control the type, volume and strength of wastewater being discharges into the sewer system; to regulate grease from restaurants and institutions; to connect new developments; to plant and specify sewer design, installation and maintenance; to require private sewer inspections and rehabilitations; and to enforce actions for noncompliance, permits, fees, and fines.

Legal Authority Check those items for which you have legal authority

Sewer use ordinance, last revised on 2015

A sewer use ordinance is probably the most critical legal document you have for your sewer system. You should review it regularly and revise it as needed with legal counsel.

Sewer Service Agreement - With City of Sheboygan (1975)

Town of Sheboygan Ordinances

Section 3: General Use Provisions

Section 3.7: Conditional Uses in specific zoning districts

Section 4 and 5: Conditional Uses in specific zoning districts

Town of Sheboygan Sanitary District 2 Ordinances

Section 1: Sewer Use and Service Charge Ordinance

Section 3: Public Sewers Required

Section 2: Definitions

Pretreatment or Industrial Control Programs: List all significant users

F-Troop/Haysen Bldg	5300 Hwy 42N
IFS Waste Treatment LLC	3611 Enterprise Dr

High flow and/or high strength wastes can impact the collection system and treatment plant, and thus legal controls need to be in place, either through user fees/surcharges, permits or a Pretreatment Program that limits such users.

Town of Sheboygan Sanitary District 2 Ordinances

Section 4.03: Prohibitions and Limitations

Section 5.03: Industrial Discharge

Section 5.07: Pretreatment

Fat, Oil and Grease (FOG) Control List all FOG contributing users

A Grease Control and Inspection Program should be established to protect sewer pipe and lift stations from grease buildup and plugging of sewer pipes and equipment.

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 3 Understand Your Legal Authority

Illicit Discharges by Commercial or Industrial Users

All connections and discharges to a sewer system by a commercial or industrial user should be approved as regulated through the sewer use ordinance. Sewer televising can be one tool to locate unauthorized discharges.

Private Property Clear Water (sump pumps, roof or foundation drains)

Legal authority to inspect private residences and to prohibit sump pumps or drains that contribute excess clear water to the sewer system is very important in reducing inflow.

Sump pumps are inspected according to the Town of Sheboygan Clean Water Ordinance

Private Lateral Inspections/Repairs

Legal authority to require inspection of private laterals and repairs as needed is very important in reducing infiltration and reducing the risk of basement backups for the homeowner.

Legal authority is the Town of Sheboygan Ordinance. Inflow and repair needs are identified during routine inspection and televising. Laterals are the responsibility of the property owner.

Service and Management Agreements (List the Agreements)

It is important for a utility to be able to enter into contracts for servicing equipment and/or intermunicipal agreements for operating/managing their collection system by other entities, if needed.

Service agreements are arranged by the Director of Public Works

Enforcement Actions (Discuss the steps and procedures)

An enforcement program and steps should be clearly spelled out, understood and documented so that in cases where enforcement needs to be taken, it is fair and legally defensible. Legal counsel should review and approve your enforcement program.

Enforcement actions may be taken through the Town Attorney

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 3 Understand Your Legal Authority

Attachment to CMOM Step 3: Legal Authority

List of Pretreatment or Industrial Users

Name	Location	Type of Business
IFS Waste Services	3611 Enterprise Dr	Chemical Processing
F-Troop/Hayssen Bldg	5300 Hwy 42 N	Printing

Fat, Oil and Grease (FOG) Control

Name	Location	Type of Business
Blind Horse	6018 Superior Ave	Restaurant, Bar & Winery
Culver's	4225 Hwy 42 N	Restaurant
Hardee's	4409 Hwy 42 N	Restaurant
Harry's Diner	4024 Hwy 42 N	Restaurant
Holiday's	5533 Superior Ave	Restaurant & Bar
Kiku of Tokyo Inc	3709 Kohler Memorial Dr	Restaurant & Bar
Miesfeld's	4811 Venture Dr	Meat Market
Pine Hills	4914 Superior Ave	Restaurant & Bar
Pizza Ranch (City)	3518 Kohler Memorial Dr	Restaurant
Randall's Restaurant	3827 Superior Ave	Restaurant
Shuff's Last Resort	4136 Hwy 42 N	Restaurant, Bar & Bakery
Texas Road House	4304 Gander Rd	Restaurant & Bar
Tom's Drive Thru	5531 Superior Ave	Restaurant
Town & Country	W1945 Cth J	Restaurant & Bar

Gas Stations, Motels, Hotels, Automotive and Miscellaneous

Name	Location	Type of Business
Boneck Printing	1529 Twin Oaks Ln	Printing
Brantmeier Ford	3624 Kohler Memorial Dr	Car Dealership/Maintenance
Bulk Petroleum Corp	4912 Vanguard Dr	Gas Station & Mini Mart
D&H Rental Sales & Service	1434 N 38th St	Machinery/Equip Maintenance
Ecova MS 4431	4221 Kadlec Dr	Alzheimer Care Home
Ecova MS 4431	4228 Kadlec Dr	Alzheimer Care Home
Gabe's Construction	4804 N 40th St	Truck/Machine Maintenance
Genuine Mechanics	1453 N 40th St	Auto Maintenance/Repair
Grand Rental Station	3849 Enterprise Dr	Machine/Equip Maintenance
Greenscape	4218 Industrial Ct	Auto/Equip Maintenance
International Autos Group	4000 N Frontage Rd (City)	Car Dealership/Maintenance

Town of Sheboygan
 Sanitary District No. 2 Sewer
 Capacity, Management, Operations & Maintenance Plan
 Step 3 Understand Your Legal Authority

Gas Stations, Motels, Hotels, Automotive and Miscellaneous cont.

Name	Location	Type of Business
Interstate Investors Group	4024 Hwy 42 N	Gas Station
J Bee's Silver Dollar	3127 N 15th St	Tavern
Jumping Frogs Preschool	3841 Kohler Memorial Dr	Daycare
Kwik Trip	4220 Cth J	Gas Station & Mini Mart
Lake Country Academy	4101 Technology Pkwy	School w/Kitchen
Lakeshore Fleet	4024 Hwy 42 N	Commercial Truck Repair
Latter Day Saints	3920 Saemann Ave	Church
Magic Car Wash	3900 Enterprise Dr	Car Wash
Mapledale Baptist Church	4015 Superior Ave	Church
Olson Acquistions	4111 Hwy 42 N	Car Dealership/Maintenance
Phoenix Verde	4217 Kadlec Dr	Daycare
Quality Inn	4332 N 40th St	Hotel
Scotty Landscape	3823 Enterprise Dr	Auto/Equip Maintenance
Seventh Day Adventist	3910 Erie Ave	Church
Superior Car Wash	3703 Superior Ave	Gas Station & Car Wash
Superior Lawn & Garden	6510 Superior Ave	Machine/Equip Maintenance
Town of Sheb Fire House	3911 Cth Y	Fire Station/Comm Kitchen
Wal Mart	4433 Vanguard Dr	Oil Changing Station

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 4 Operation and Maintenance Activities

Step 4 Operation and Maintenance Activities

A comprehensive Collection System Operation and Maintenance Program (O&M) includes: mainline + manholes + lift stations + private laterals
Collection system O&M is the essential element of a CMOM Program. Just like your car, it will eventually fail to perform without regular maintenance and repairs.
What O&M tasks should you be doing: Studies have shown that optimizing collection system performance depends on specific maintenance tasks and frequencies. You should summarize and review your maintenance activities each year.

**Does your Collection System Annual Maintenance Program include the following activities?
Check those items you have done in the last twelve months.**

		Year	Percent
<input checked="" type="checkbox"/>	Cleaning	What percent of system last year?	2014 15%
<input type="checkbox"/>	Root Removal	What percent of system last year?	n/a
<input checked="" type="checkbox"/>	Flow Monitoring	What percent of system last year?	2014 90 +%
	Flows are monitored at the Erie and Pigeon River lift stations. A small percentage of inflow located in the City of Sheboygan is not monitored.		
<input checked="" type="checkbox"/>	Sewer Line Televising	What percent of system last year?	2014 15%
<input checked="" type="checkbox"/>	Manhole Inspections	What percent of system last year?	2014 15%
	Completed with televising.		
<input checked="" type="checkbox"/>	Manhole Rehabilitation	What percent of system last year?	2014 15%
<input checked="" type="checkbox"/>	Mainline Rehabilitation	What percent of system last year?	2014 As needed
	As needed based on inspections.		
<input type="checkbox"/>	Private Sewer Inspections	What percent of system last year?	n/a
<input type="checkbox"/>	Private Sewer I/I Removal	What percent of system last year?	n/a
<input type="checkbox"/>	Lift Station O&M	What percent of system last year?	2014 100%

Since every collection system is unique, work to find out which maintenance activities and frequencies will give you the best value of the O&M dollar spent. Recommended references are found in Wisconsin CMOM Page 25.

Lift station O&M is on-going based on regular inspection and if applicable emergency alarms.

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 5 Design and Performance Standards

Step 5 Design and Performance Standards

Design and performance standards are often contained in state or municipal codes. These standards establish requirements for collection system design, construction, inspection and final approval. Some municipalities have employees that review, approve and/or inspect collection system design and construction. Other municipalities or utilities contract with a registered professional engineer to perform these services or require the company constructing sewers to hire a qualified professional to provide these services.

The CMOM Program summary should include the procedures followed to maintain control of the design, construction and inspection of the collection system.

Design and Performance Standards Procedures. Check those that apply to your collection system and include these documents in your written CMOM Program.

State Plumbing Code

Safety and Professional Services (SPS 382) Wisconsin Administrative Code - *Design, Construction, Installation, Supervision, Maintenance and Inspection of Plumbing* must be followed when designing and constructing residential and commercial plumbing and pipes. An important installation is the connection of private laterals to the sewer main. Often these connections, if not installed properly can be significant sources of infiltration, so a municipal program that ensures proper construction and connection of private lateral pipes will significantly control infiltration.

Town of Sheboygan Sanitary District No. 2 Sewer requires all plumbing to meet the State of Wisconsin Plumbing Code. WAC Safety and Professional Services (SPS 382).

State Sewerage System Code

Department of Natural Resources Chapter NR 110, Wisconsin Administrative Code - Sewerage Systems must be followed when designing and constructing sewage conveyance systems.

All systems are required to meet Wisconsin Administrative Code (Natural Resources and Safety and Professional Services) and Sanitary District standards. Plans are reviewed by the Town Engineer and DPW Supervisor to assure compliance. All installations are inspected and "As Built" filed at the Town of Sheboygan.

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 5 Design and Performance Standards

Local communities may have their own set of standards and requirements, specific to community needs, in the design and construction of building plumbing and sewerage systems.

Who designs the sewer system and what standards do they follow?

Who inspects sewer construction work and what procedures are followed?

All systems are required to meet State Code and Sanitary District standards. Plans are reviewed by the Town Engineer and DPW Supervisor to assure compliance. All installations are inspected by the DPW and Town Engineer and "As Built" filed at the Town of Sheboygan.

Sewer system extensions are reviewed for compliance with the City of Sheboygan Municipal Code and Master Plan prepared by the Bay Lakes Regional Planning Commission.

Check those that apply below and identify the standards and procedures that are followed for each.

- Municipal employees for sewer design work
- Municipal employees for sewer construction inspection work
- Contracted services for sewer design work
- Contracted services for sewer construction inspection work

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 6 Overflow Emergency Response Plan

Step 6 Overflow Emergency Response Plan

Emergency Capability Check those that apply.

Alarm System and Routine Testing

When equipment failure or high wastewater flows occur, especially at lift stations, it is critical that (1) you have adequate alarm systems in place to notify the proper collection system personnel of the problem; and (2) your alarm systems (visual, audible or dialer) are working; and (3) you can respond quickly. Alarm systems should be regularly tested to ensure their reliability. All lift stations should have an alarm system of some kind. Most should be telemeter.

Emergency systems at Town of Sheboygan lift stations are currently Dialer to Pager. Pager hierarchy is 1) DPW Bill Blashka 2) Joe Winscher 3) John Witters. Last call is the Town Hall. Warnings include:

- High and low level warnings
- Power failure
- Pump failure

Emergency Equipment

Emergency equipment such as back-up generators, portable pumps, alternative power sources and pump trucks, should be either on-site or quickly/readily available for emergency operation. In cases where portable equipment is used, the capacity of holding pipes and wet wells should be known so that placement of portable equipment can be prioritized to minimize sanitary sewer overflows and basement backups.

All equipment is on-site at Town municipal shed.

Emergency Procedures

As part of an Emergency Response Plan, written detailed procedures should be established for all known emergencies that potentially could occur, such as SSOs, basement backups, power outages, lift station failures, sewer blockages, for main breaks, severe rain events and flooding. Emergency response situations should be routinely practiced as part of employee training.

Sanitary District No. 2 Sewer adopted an Emergency Response Plan September 2013

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 6 Overflow Emergency Response Plan

Mutual Aid Agreements

Having a signed mutual aid agreement on file prior to an emergency can greatly facilitate planning and prioritizing for agencies responding to your requests for help. Consider participating in the Wisconsin Water/Wastewater Agency Response Network (WisWARN at www.wiswarn.org)

A Mutual Aid Agreement is part of the District's pending list; in progress.

Communications/Notifications (WDNR, Internal, Public Media)

During emergencies, communications are critical. It should be very clear to all response personnel what roles they have and who contacts whom. There should be an internal communication procedure as well as who will be notifying and communicating with external agencies, the public and the media.

This is included in the Emergency Response Plan of September 2013

Communications/Notifications (WDNR, Internal, Public Media)

Plan. Act. Review. Do (redo). What worked and did not work? Were any mistakes made? What could be improved? Use information gathered during review to revise procedures for future emergencies.

This is included in the Emergency Response Plan of September 2013

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 6 Overflow Emergency Response Plan

Attachment to CMOM Step 6: Overflow Emergency Plan

Emergency Equipment

Name

Backup Generator

SOPs

Spotlight

Traffic Signs

Air Monitor

PPE: Gloves, safety glasses, rubber boots, etc.

Cellular Phone

Digital Camera

Laptop

Safety truck w/traffic cones, safety lights, etc.

*All items are located at the Municipal Shed (3804 Enterprise Dr) and on the utility trucks.

Mutual Aid Agreements

When emergencies arise, outside assistance may be needed. This emergency assistance could be from a nearby community, utility company, contractor or others. One way to ensure that intercommunity assistance will be available when required is to enter into mutual aid agreements.

A Mutual Aid Agreement is part of the District's pending list; in progress.

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 7 Capacity Assurance

Step 7 Capacity Assurance

Check those documents that you have.

- Current and Up-to-date sewer maps
- Sewer system plans and specifications
- Manhole location maps with numbered manholes and GPS coordinates
- Lift station pump and wet well capacity information
- Lift station O&M Manuals

Check those items that you have identified within your sewer system.

- Areas with flat sewers
- Areas with surcharging
- Areas with bottlenecks or constrictions
- Areas with chronic basement backups or sanitary sewer overflows (SSO's)
- Areas with excessive debris, solids or grease accumulation
- Areas with heavy root growth
- Areas with excessive infiltration (I/I)
- Sewers and manholes with severe corrosion
- Sewers with severe defects that affect flow capacity
- Adequacy of capacity for new connections
- Lift station capacity or pumping problems
- Wet weather relief points or overflow structures (if any)

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 8/9 Annual Self Audit/Special Studies

Step 8 Annual Self Audit/Special Studies

The Success of the CMOM Program depends upon the careful review of the program annually. Where have we seen improvements and successes? How can we spend budgeted money most effectively to make the program better? The Compliance Maintenance Annual Report (CMAR) Collection System section is, in part, an annual self evaluation or audit of the collection system CMOM Program. Once data is entered into the CMAR it will create trend graphs. The trend graphs for various collection system performance indicators can help determine if the CMOM is effective. An effective CMOM should result in a reduction in I/I (peaking factors), SSO's, basement backups, complaints, and equipment and pipe failures. Generate trend graphs to show progress toward an optimum performing collection system.

COLLECTION SYSTEM PERFORMANCE INDICATORS

- Lift Station Failures (failures/lift/station/year)**
- Sewer Pipe Failures (pipe failures/sewer mile/year)**
- Sanitary Sewer Overflows (Number/sewer mile/year)**
- Basement Backups (Number/sewer mile/year)**
- Complaints (Number/sewer mile/year)**
- Peaking Factor Ratio (Peak Monthly: Annual Daily Average)**
- Peaking Factor Ratio (Peak Hourly: Annual Daily Average)**

Step 9 SPECIAL STUDIES

From time to time a utility or municipality may conduct special studies on its wastewater collection system.

- Infiltration/Inflow (I/I) Analysis**
Evaluates wastewater flow occurring throughout the collection system to identify specific infiltration and inflow components and whether these flow components are excessive.
- Sewer System Evaluation Survey (SSES)**
When I/I is excessive an SSES study will assess costs for removing I/I versus conveying and treating it, and identifies a cost-effective collection system rehabilitation program to remove excessive I/I.
- System Evaluation and Capacity Assurance Plan (SECAP)**
Contains elements of both the I/I and SSES analyses, but is typically more focused on SSO occurrences and developing recommendations to abate or eliminate SSO's as it relates to capacity issues.
- Lift Station Evaluation Report**
An assessment of lift station conditions, capacity limitations, and recommendations for improvements.
- Others**

Town of Sheboygan
Sanitary District No. 2 Sewer
Capacity, Management, Operations & Maintenance Plan
Step 10 Compliance Maintenance Plan Annual Report

Wisconsin's Compliance Maintenance Program

The Compliance Maintenance Program is one of the successful cornerstones of the Wisconsin Department of Natural Resources regulatory Wisconsin Pollutant Discharge Elimination System (WPDES Program). The web-based Compliance Maintenance Annual Report (CMAR) is a self-evaluation report and grading system for Wisconsin's domestic wastewater treatment plants and sanitary sewer systems. Since its beginning in 1987, the Compliance Maintenance Program has been extremely successful in achieving its purpose of encouraging and, where necessary, requiring owners of publicly and privately owned domestic wastewater treatment works to take necessary actions to avoid water quality degradation, and prevent violations of WPDES permit effluent limits and conditions.

Compliance maintenance promotes an owner's awareness and responsibility for wastewater conveyance and treatment needs; maximizes the useful life and performance of treatment works through improved operation and maintenance; and initiates formal planning, design and construction to prevent WPDES permit violations. Through a conventional and readily understandable grading system, the CMAR brings awareness and understanding to governing officials about wastewater capital and management needs. Most importantly, it fosters communication among governing officials, operators and the Department about the wastewater treatment plant and collection system. Governing bodies must review each year's CMAR and pass a resolution regarding it. Low grades require recommendations or action plans by the community to address the cause of any problems or deficiencies and improve the system.

Owners of wastewater treatment facilities, as well as collection systems, including satellite systems, are required by Wisconsin Administrative Code Chapter NR 208—Compliance Maintenance to electronically submit an annual report. Electronic reporting began in 2005. Collection systems complete two sections of the CMAR, Sanitary Sewer Collection Systems and Financial Management. The Sanitary Sewer Collection System section can be found on the next four pages. Performance indicators and trend graphs are automatically generated as part of this section of the CMAR to help operators evaluate the success of their CMOM or O&M program. The questions in the CMAR are to guide operators in developing a CMOM Program, and in the operation & maintenance and financial management of their collection system.

For more information on the WPDES permit, Compliance Maintenance and CMOM Programs, see these web pages:

-  WPDES Permit Program: <http://dnr.wi.gov/org/water/wm/ww>
-  Compliance Maintenance Program: <http://dnr.wi.gov/org/water/wm/ww/cmar.html>
-  WDNR Collection System Maintenance brochures: <http://dnr.wi.gov/org/water/wm/ww/cmar/brochures.htm>
-  WDNR CMOM Web page: <http://dnr.wi.gov/org/water/wm/ww/cmar/cmom.htm>
-  The Water Environment Federation (WEF) CMOM Info: <http://www.cmom.net>