

CAPACITY MANAGEMENT OPERATION AND  
MAINTENANCE PLAN (CMOM)



*Village of  
Paddock Lake*

*Established 1960*

# **CAPACITY MANAGEMENT OPERATION AND MAINTENANCE PLAN**

Revised 12/09/2019

## **I. Introduction**

The purpose of the Village of Paddock Lake's Capacity Management Operation and Maintenance plan (CMOM) is to document activities that the Village utilizes to manage its wastewater collection system effectively. Effective management of a collection system includes:

- Minimizing the number and impact of Sanitary Sewer Overflows (SSOs)
- Providing adequate sewer capacity to convey peak flows.
- Maintaining and/or improving the collection system infrastructure in a reliable condition now and as the system grows.

## **II. Document Organization**

This CMOM has been prepared for the Village of Paddock Lake's Department of Public Works by the Village Administrator in compliance with requirements of the Wisconsin Department of Natural Resources (WDNR).

The CMOM is intended to meet the requirements of both the Village code and the Statewide General Waste Discharge Requirements (WDNR).

The CMOM includes eleven elements as listed below. Each of these elements forms a section of this document.

### **CMOM ELEMENTS**

1. CMOM Goals
2. Organization- 2019
3. Legal Authority
4. Operations and Maintenance Program
5. Design and Performance Provisions
6. Overflow Emergency Response Plan
7. FOG Control Program
8. System Evaluation and Capacity Assurance Plan
9. Monitoring, Measurement and Program Modifications
10. CMOM Program Audits
11. Communication Program- 2019

## **III. Location and Description Wastewater Collections System**

The Village of Paddock Lake is located in the center of Kenosha County. The Village lies approximately 6 miles west of the City of Kenosha and 2.5 miles north of the border of Illinois.

The Village was incorporated in 1960 and as such the wastewater collection system is assumed to have been initially constructed around that time frame. The system has expanded with the population and development to over 16.33 miles of sewer gravity and force main, and 5 pump stations that feed a 0.80 million gallon per day wastewater treatment plant (WWTP).

The wastewater collection system and WWTP are entirely owned by the Village of Paddock Lake. In addition, certain geographical portions of the Village are serviced by sanitary sewer by the Village of Salem Lakes per contractual agreement

### III. Terms and Definitions

(A)-Nuisance – anything which meets all of the following requirements:

(a) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property for such a length of time or is of such a geographical scope, so as to pose a serious health hazard; and

(b) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and

(c) Occurs during, or as a result of, the treatment or disposal of wastes.

(B) - Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include

Category

(i) Overflows or releases of untreated or partially treated wastewater that reaches navigable waters of the State;

(ii) Overflows or releases of untreated or partially treated wastewater that do not reach navigable waters of the State; and

(iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system, and which cause material damage to private property.

(C) - SSO Reporting System – Online spill reporting system that is hosted, controlled, and maintained by the State Department of Natural Resources.

(D) - Untreated or partially treated wastewater – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant head works.

- (E) - Wastewater Collection System or Sanitary Sewer System – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant head works used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

## 1. CMOM Goals

The Village of Paddock Lake and more specifically the Paddock Lake Sewer Utility District utilize preventative maintenance practices in their efforts to properly maintain and operate the sanitary sewer collection system. Sewer Maintenance works in tandem with the Contract Village Engineer in efforts to improve the condition of and extend the life of collection system assets. The Sewer Utility District has developed this CMOM to achieve the following collection system management goals and objectives listed below. These goals and objectives have been adopted by resolution.

- Proper maintenance, operations and management of all parts of the wastewater collection system.
- Provision for adequate capacity in the collection system to convey peak flows.
- Minimize the frequency of sanitary sewer overflows (SSOs).
- Mitigate the impact of SSOs.

The CMOM objectives are outlined, implemented, evaluated Sewer Maintenance and Preventative Maintenance Program includes:

1. Continue Preventative Maintenance on the collection system to decrease SSOs.
  - a. Clean all Village sewer mains within the identified required maintenance period.
  - b. Continue with monthly, quarterly, bi-annual and annual preventative maintenance hydro-cleaning and power-rod cleaning of identified sewer mainline target (problem) areas.
  - c. Conduct a video condition assessment of each sewer mainline every ten years and continuously identify areas requiring root control.
  - d. Refer sewer mains with repeat non-scheduled maintenance to Contract Village Engineer for evaluation.
  - e. Conduct appropriate analysis/evaluation of SSOs utilizing historical maintenance and activity data and records and provide recommendations to reduce future risk.
2. Identify collection system blockages due to fats, oil and grease (FOG) and develop strategies to decrease backups.
3. Operate all pump stations at peak efficiency and perform preventative maintenance on equipment at all sanitary sewer pump stations.

4. Maintain records of the sanitary sewer system and respond to inquiries.
5. Assist with the development of a capital improvement program directed at maintaining the current sewer assets, improving system reliability and providing adequate future capacity.

## **2. Organization**

### **2.1. Village and Sewer Utility District**

Wastewater Public Works under the direction of the Village Administrator is responsible for oversight of the CMOM, SSO, and other related regulatory procedures. Wastewater/Public Works consists of Water and Sewer system Maintenance, and operation of the Wastewater Treatment Plant. As related to this Sewer System Management Plan, the communication and level of responsibility is illustrated in the following chart.

### **2.2. Organization Chart**

See Appendix A for organization chart

### **2.3. SSO responsibility & communication**

#### **SSO Management & Reporting – Wastewater Treatment Plant Operator (WWTPO)**

The WWTPO reports all sanitary sewer overflow (SSO) incidents to the WDNR. The WWTPO shall be responsible for managing the SSO response, investigating the cause, and reporting the SSO to the appropriate parties. As related to this CMOM, the WWTPO's role is as follows:

- Manage field operations and maintenance activities
- Provide relevant information to the Administrator
- Lead emergency response/respond to stoppages and SSOs
- Work with Administrator to report SSOs to the State
- Train field crews
- Work with Village Administrator to implement collections system capital improvement programs
- Perform preventative maintenance activities
- Report equipment needs to Village Administrator

#### **SSO Response**

The On Call sewer staff member shall be the highest level sewer staff member on duty at the time of spill discovery and reporting. The On Call Staff shall be responsible for immediately notifying the local WWTPO and Village Administrator of SSOs. On Call Staff shall take any means necessary to safely contain and redirect overflows to minimize negative impacts. All actions taken by On Call Staff shall be in accordance with prior spill response training, instruction, and individual assessment of the situation. The person acting as On Call Staff may

transition to another sewer staff member during an emergency as directed by the WWTPPO or the Administrator.

## **2.4. Chain of Communication for SSO Report**

To facilitate consistent reporting procedures for the public, the Department of Public Works has implemented a one-stop call center. Emergency sewer calls, including SSOs are directly dispatched to the sewer maintenance crew during all business hours. As backup, the Kenosha County Sheriff's Department is available to locate Village staff members to ensure prompt response.

The WWTPPO has a process for receiving, responding to and reporting SSOs. The On Call Staff member is responsible for directing crew's through the entire SSO event from response, to mitigation, cause removal and clean-up. The On Call Staff member is also responsible for ensuring photographs are taken and all necessary paperwork is completed in full. After the event, the On Call Staff member is responsible for communicating the details of the event to the Village Administrator or the Waste Water Treatment Plant Operator.

The WWTPPO is responsible for timely reporting of the incident to the appropriate agencies, as well developing a plan to increase or change preventative maintenance activities to prevent future spills.

- The WWTPPO and Village Hall customer service phone line (262) 843-2713 is staffed 8 AM through 4:30 PM Monday through Friday. As a backup, the Kenosha County Sheriff's Department will contact the appropriate WWTPPO or Village Administrator. The (non-emergency) line is (262) 843-2371

Once a report of an SSO is received (or internal staff witness an SSO), the On Call Staff member is contacted immediately via cell phone. If the spill is a Category (i) SSO (see terms and definitions), the On Call Staff contacts the WWTPPO and Village Administrator immediately.

- On Call Staff will dispatch additional personnel and/or pump equipment contractor if necessary for assistance with mitigation, blockage clearing and clean-up.

On Call Staff takes photographs and completes SSO reporting forms.

- WWTPPO Manager then contacts appropriate agencies, completes appropriate forms, and compiles all information and photos into SSO logs.
- WWTPPO submits online reports.
- On Call Staff reviews information with the WWTPPO and Village Administrator and a plan is developed for preventative maintenance activities at the spill location as necessary.
- Copies of SSO logs are shared with office staff for input and training.

### **3. Legal Authority**

#### **3.1. General**

The Village of Paddock Lake has a comprehensive sewer use and fee ordinance identified as Chapter 7.0 of the Village of Paddock Lake Municipal Code (VPLMC). The Chapter is available at the Village Clerk counter at Village Hall or on the Village website <http://www.paddocklake.net>.

Chapter 7.0 consists of the following sections

#### **II. PADDOCK LAKE SEWER UTILITY DISTRICTS**

- 7.54 Definitions
- 7.55 Use of the Public Sewers
- 7.56 Industrial Wastes in Public Sewers
- 7.57 Basis for Sewer Service Charges
- 7.58 Amount of Sewer Service Charges
- 7.59 Billing Practice
- 7.60 Right of Entry, Safety and Identification
- 7.61 Sewer Construction and Connections
- 7.62 Audit, Notification and Records
- 7.63 Land Developments - Sewers
- 7.64 Notice of Violation
- 7.65 Rules for Extensions
- 7.66 Deferment of Special Assessments - A-1 Agricultural Property
- 7.67 Sewer System Facilities
- 7.68 Appeals
- 7.69 Conflicting Ordinances Repealed

#### **3.2. Preventing illegal discharges**

Chapters 7.55 through 7.63 of the Municipal Code defines illegal discharges into the sewer system. These materials include but are not limited to fat or oil or grease (FOG) materials,

hazardous or toxic materials, non-sink disposal materials, corrosive and reactive materials, non-sewage water such as storm water or well water or garden water. There are numerous specific limits for material above certain concentrations.

### ***3.3. Requirement for proper design & construction***

Standards for design and construction of sewer systems and private lateral connections are controlled by Village ordinance 7.61 and State of Wisconsin plumbing codes. Improvement Standards and Plumbing Code enforcement is defined in Chapters 7 of the VPLMC.

### ***3.4. Ensuring access for maintenance, inspection and repair of village Owned or maintained laterals***

The Village does not maintain private lateral sewer lines. Property owners are responsible for proper installation, operation and maintenance of private laterals. This responsibility begins at the connection to the sanitary sewer main. The Village has no responsibility for repairs, maintenance or replacement of any sanitary sewer line or lateral on private property.

Ordinance 7.61(8) places full responsibility in installation, maintenance and repair of sewer laterals, private interceptors, manholes and private sewer mains on the owner of such devices.

Ordinance 7.60(a) and (b) of the VPLMC provides authority for the Village to enter private property for making inspections to enforce any ordinance with exceptions as described therein.

### ***3.5. Limiting discharge of fats, oils, and grease and other debris that may cause blockages***

Ordinance 7.56 requires all commercial restaurants to install grease traps and have them properly maintained. The cost of maintenance or repair of laterals and mains due to improperly maintained grease traps is the responsibility of the property owner.

### ***3.6. Enforcing violations of the sewer ordinance***

Ordinance 7.64 provides for enforcement of all sewer related ordinance.

## **4. Operations and Maintenance Program**

### ***4.1. Collection System Maps and Information***

Maintenance, paper maps and computerized log records are the primary method for recording maintenance, repairs, and upgrades to those collection system assets. System maps are available at Village Hall in the Building and Zoning Department.

The wastewater collections service area comprises approximately 1,683 acres within the Village



planning area. The system serves a population of approximately 3,000 people through approximately 80,345 lineal feet of gravity and force main piping, five lift stations, and 5,882 linear feet of private interceptor lines.

All wastewater flows are conducted to the WWTP at 23201 – 62<sup>nd</sup> Street.

#### **4.2. Preventative Operations and Maintenance**

The WWTPO has developed several maintenance approaches for the sewer collection system. Village wide mainline cleanings, ongoing preventative maintenance of problem areas, use of closed circuit camera inspections (CCTV) of mainlines, regular lift station inspection and equipment maintenance, along with coordination with the Building Department to ensure that FOG nuisance facilities incorporate the appropriate capture devices.

The Waste Water Department is responsible for ensuring that there is adequate capacity in the collection system to convey peak flows.

The WWTPO is responsible for these collection system management goals:

- Proper maintenance, operations and management of all parts of the wastewater collection system.
- Minimize the frequency of sanitary sewer overflows (SSOs).
- Mitigate the impact of SSOs.

Objectives of Wastewater Collection System Preventative Maintenance Program include:

1. Increase Preventative Maintenance on the collection system as necessary to decrease and ideally eliminate SSOs.
  - a. Clean all sewer mains within the identified required maintenance period.
  - b. Continue with monthly, quarterly, bi-annual and annual preventative maintenance hydro-cleaning and power-rod cleaning of identified sewer mainline target (problem) areas.
  - c. Conduct a video condition assessment of each sewer main every ten years and continuously identify areas requiring root control.
  - d. Refer mains with repeat non-scheduled maintenance to the Village Administrator and consulting engineers for possible Programming in the Capital Improvement budget to replace or repair such sections of the system.
  - e. Conduct appropriate analysis/evaluation of SSOs utilizing historical maintenance and activity data and records and provide recommendations to reduce future risk.
2. Identify collection system blockages due to fats, oil and grease (FOG) and develop strategies to decrease backups.
3. Operate all pump stations at peak efficiency and perform scheduled preventative maintenance on equipment.
4. Maintain records of the sanitary sewer system and respond to inquiries in a timely

manner but no later than two days.

5. Assist with the development of a capital improvement program directed at maintaining the current sewer assets, improving system reliability and providing adequate future capacity.

### **4.3. Rehabilitation and Replacement Plan**

Paddock Lake Sanitary Sewer Utility District developed a "Sewer Collection System Master Plan" in 2006 that, along with identifying future facility needs, identified existing system deficiencies. This Master Plan, along with the Preventative Operations and Maintenance Program, are used to maintain a comprehensive list of sewer facilities that require rehabilitation and/or replacement.

The Village has historically dedicated approximately 8% of the wastewater collection system revenue for annual rehabilitation and repair. This funding is in addition to any major line replacement or pump station upgrades identified in the capital improvement programs. The funding has been established to make prioritized line repairs identified in the annual and ten year CCTV condition assessment of the collection system. This program prioritizes the repair of structural defects to ensure the system can consistently provide service and also prioritizes repair of defects such as protruding taps and roots that can or may cause SSOs.

### **4.4. Staff Training**

The WWTPO and Public Works staff is required to complete various types of training as listed below. Division staff responsible for maintenance is encouraged to study, prepare for and take WDNR Certification testing. In addition to WDNR certification, staff is required to attend and or obtain training in the following:

Lock out/tag out	confined space	SSO prevention
Blood borne pathogen	utility locating	gas detection
First aid	shoring	pump repairs
CPR	fall protection	HAZMAT
Traffic control	NIM's training	WDNR CEU's

### **4.5. Equipment and Replacement Part Inventories**

The Water & Sewer Division staff is responsible for keeping an inventory of critical replacement parts for repairing pump stations, mains, manholes, and critical emergency response equipment. The following is a list of critical replacement parts that are to be kept and maintained at Village facilities.

#### Critical Parts List

Manhole Lids & Frames  
4" Pipe (6", 8", and 10")  
Repair Couplings

Emergency Response Kits  
Sand, Gravel & Asphalt  
1x 2" Pump  
1x 3" Pumps  
1x Backup Generators  
Electrical Connector Kits  
Lift Station belts  
Obtainable equipment and services as part of contract vendor or mutual aid  
VAC Truck (Pat's Sanitary)  
4" Trash pump (Village of Bristol)  
Sewer camera equipment (Town of Salem)  
Hydro Jetter (Wanasek Corp.)  
Trench excavation equipment (Wanasek Corp.)

## **5. Design and Performance Provisions**

### ***5.1. Design and Construction Standards and Specifications***

The Village of Paddock Lake maintains "Improvement Standards" and "Construction Specification" adopted by Village Board in December 2009. The standards, along with Municipal Code Chapter 7, and State of Wisconsin Plumbing Code are the primary instrument used for installation of new or upgrading of existing sewer systems including mains, laterals, manholes, and pump stations. In addition the Village Sanitary Sewer Utility District adopts the following standards:

Wisconsin Administrative Code Chapter NR 110 for design and construction of sewage collection systems.

Construction Specifications are available to download on the Village's website (<http://www.paddocklake.net/>) and for inspection at the Village Hall.

### ***5.2. Standards for Inspection & Testing of New, Rehabilitated, and Replaced Facilities***

The Village of Paddock Lake sewer construction standards and codes found in chapter 7. As such, all new, rehabilitated and replaced sewer facilities require inspection involving pressure testing, mandrelling, water exfiltration and/or post construction closed circuit television inspection overseen by a Village construction inspector or consulting engineer prior to acceptance of work.

## **6. Overflow and Emergency Response Program**

### ***6.1. General***

The purpose of the Sanitary Sewer Overflow and Emergency Response Program is to ensure that

the Village personnel follow established guidelines in responding to, stopping, containing, cleaning and decontaminating sanitary sewer spills and follow proper reporting procedures.

The Village of Paddock Lake has developed a comprehensive SSO response plan as part of this document. The SSO Plan is titled "Sanitary Sewer System Operations, Maintenance, Overflow Prevention, and Response Plan" and was prepared by Village Staff. The SSO plan is provided to all sewer maintenance and operation staff and regular training is conducted to limit the response time between a reported spill and containment/management of the spill. The SSO plan is available at the Village Hall.

The SSO Plan contains eight key elements. Below is a list of the key elements. Details can be found in Appendix B.

1. SSO Notification
2. SSO Response Communications
3. Containment and Control
4. Clean-up
5. Documentation
6. Post SSO Notification and Reporting
7. Spill Sampling and Monitoring
8. Records Keeping

## **6.2. Role of Responders**

Responders to SSOs are required to take the appropriate action to secure the wastewater overflow area, relieve the cause of the overflow and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and to protect the environment. All responders should be familiar with and carry a copy of the Village's SSO response plan. **Every effort must be made to prevent sewage from reaching state waters.**

## **6.3. Legal Requirements**

The Village must report all SSOs to the Wisconsin Department of Natural Resources in accordance with State Statute 283.55 and 283.65

## **6.4. Incident Notification**

The SSO Plan identifies specific procedures, agencies, and contact number to be notified in the case of an overflow. The following is a list of Village personnel, external agencies, and vendors that are included in the SSO plan.

Wastewater Treatment Plant: 262-843-2824 or 262-620-4511 during regular business hours  
Waste Water Treatment Plant after hour's emergencies: 262-843-2371  
Village Administrator: 262-843-3617 or 262-206-8113 during regular business hours

External Agencies

Wisconsin Department of Natural Resources: Nicholas Lent, 1-414-263-8623,  
[Nicholas.Lent@wisconsin.gov](mailto:Nicholas.Lent@wisconsin.gov)

Vendors/contractors:

Vactor Truck Service:

Pats's Septic Service, 262-537-4988

Wanasek Construction 262-763-7811

Electrician

Pieper Electric, 414-831-1232 or 414-587-0320

Pump Repair

Crane Engineering, 920-733-4425

Generator

Cummins Power, 651-286-2079

Traffic Control

Kenosha County Sheriff's Department, 262-843-2371

Kenosha County Highway Department, 262-857-1870

Mutual Aid

Village of Bristol, Randy Kerkman 262-857-2368

Town of Salem, Brad Zautcke 262-843-2313 or 262-843-2753

Emergency Services:

Fire Dept. 911 or 262-843-2439

EMS 911 or 262-843-2439

## **7. Fats, Oils and Grease (FOG) Control Program**

The Village has adopted and implemented a Pretreatment Program that limits the concentration of FOGs that can be discharged to sanitary sewer system and establishes a discharge permit system. Commercial and industrial dischargers that could potentially discharge FOGs at elevated concentrations are required to obtain a discharge permit and to install grease removal devices (grease traps) to ensure compliance with FOG discharge limit.

### **7.1. Public Education and Outreach**

The Plumbing and Building Inspector inspects businesses and agencies that are sources of FOG releases. Prior to each visit, the Village Building Dept. mails an inspection letter and brochure to the businesses clearly explaining the responsibility of the business, the effect of FOG, the legal liability of releasing FOG, and methods of control and disposal. During each inspection, Village personnel talk with the business owners/managers and their workers about the impact of FOGs to the collection system and the wastewater treatment plant. They provide additional literature as necessary.

## **7.2. Disposal**

The Village is not capable of collecting or disposing of FOG. The following is a list of known agencies and facilities that can and will accept FOGs outside of the Village.

**FOG Collection: Pat's Septic Service 262-537-4988**

**FOG Disposal: Burbank grease 414-345-9841**

## **7.3. Legal Authority**

The Village's Sanitary Sewer and Building Code require that grease removal devices be sized in accordance with criteria set forth in the Uniform Plumbing Code. Legal authority for the Village to require and inspect grease removal devices has been established by Ordinance 7.56(g) of Village Municipal Code. The ordinance also provides an enforcement procedure for discharge permits and a system of penalties for noncompliance.

## **7.4. FOG Device Management**

Records of fat, oil, and grease source management devices are maintained by the Plumbing Inspector. Records are kept for all businesses that are required to install and maintain FOG devices by their Village operating permit. All businesses are required to maintain records of FOG device maintenance including disposal logs that track the date FOG waste was removed, quantity removed, Disposal Company, and disposal location.

## **7.5. Inspection and Enforcement**

FOG interceptor and maintenance logs are inspected annually by the Plumbing Inspector. Any establishment that is found to be in violation of FOG ordinances is subject to more frequent inspection at the discretion of the Village. Enforcement of FOG violations is provided through mechanisms described in Element 3.

All businesses that require FOG interceptors receive education and outreach as described in ordinance 7.56 during the annual inspection or more frequently as needed.

## **7.6. FOG Hot Spots**

There are two known locations within the Village collection system that are subject to blockage from fats, oils or greases. These known hot spots are routinely inspected by Village staff and are cleaned more frequently.

Location	Cause	Monitoring
7325-256 <sup>th</sup> Ave.	Food waste grease	Monthly inspections of main
Main in STH 50	Food waste grease	Monthly inspections of main

**Attached as Exhibit "G" depicts the mapped locations of FOG "Hot Spots" and likely SSO's**

## **7.7. Source Control Measures**

The Village provides education and outreach through methods described in ordinance 7.56. The Village has found it necessary to more frequently inspect the business know as Lucky Chen Restaurants grease separating equipment and the collection system main serving the restaurant.

## 8. System Evaluation Report

The Village of Paddock Lake's consulting engineer, Baxter & Woodman completed in 2004 a sewer collection system evaluation. The report is available for review at the Village Hall. The evaluation identified realistic conditions in which an SSO could occur in the existing system. Areas of infiltration were identified, and many of the identified infiltration areas have been repaired.

### 8.1. Evaluation

The Village of Paddock Lake has experienced twelve Category (i) or (ii) Sanitary Sewer Overflow (SSO) within the past ten years. Each incident is listed below. The volume provided is the amount of sewage discharged to waters of the State of Wisconsin.

SSO YEAR	LOCATION	REASON	VOLUME (GAL)
Oct 2007	72 <sup>nd</sup> St and 248 <sup>th</sup> Ave manholes	Electrical equipment failure 248 <sup>th</sup> lift station	2000 gallons
August 2007	WWTP oxidation ditch	Excessively heavy rains 6.5 inches in 26 hours	600 gallons
June 2008	WWTP oxidation ditch	Excessively heavy rains 5.56 inches in 28 hours	400 gallons
March 2009	Hwy 50 and 248 <sup>th</sup> Ave	Grease plugged main	300 gallons
January 2009	67 <sup>th</sup> St and 244 <sup>th</sup> Ave	Unknown	100 gallons
June 2009	WWTP oxidation ditch	2.61 inches of rain in 2 hours	unknown
August 2009	248 <sup>th</sup> Ave and 71 <sup>st</sup> ST	Force main break	14,000 gallons
March 2011	78 <sup>th</sup> St lift station	Check valve leak	30 gallons
December 2011	WWTP effluent wet well	Damage to control wires	33,000 gallons
December 2011	WWTP effluent line	Excavator dug into effluent line	9,000 gallons
October 2012	75 <sup>th</sup> St and 248 <sup>th</sup> Ave	Grease in line	2,500 gallons
October 2012	Hwy 50 and 248 <sup>th</sup> Ave	Grease plug in line	200 gallons
January 2013	236 <sup>th</sup> Ave. and 68 <sup>th</sup> St	Grease plug in line	15,000 gallons
February 2014	244 <sup>th</sup> Ave and 69 <sup>th</sup> St	Adult diapers in line	1,000 gallons
2016	0	0	0
July 2017	6715-243 <sup>rd</sup> /6055-242	9.5 inches of rain	1,600 gallons
April 2018	L.S. No 1	Power Failure	2,000 gallons
March 2019	L.S. No. 1	Power failure	1,000 gallons
May 2019	248 <sup>th</sup> and STH 50	FOG in lines	1,500 gallons

### 8.2. Design Criteria

The Village's Improvement Standards, establish design criteria for any reconstruction or expansion of the wastewater collection system. All design criteria meet the necessary requirements to provide adequate operation of the existing and future collection System.

### 8.3 Capacity Assurance

The wastewater collection system has adequate capacity and a capacity assurance plan is not required at this time. If a capacity assurance plan is required, the procedures layout in Appendix C will be followed.

## 9. Monitoring, Measurement, and Program Modifications

The Waste Water Department strives toward proper maintenance, operations and management of the sanitary sewer collection system. Efforts focus on reducing SSO frequency and impacts, improving collection system reliability, and ensuring there is enough capacity in the system to convey peak flows. The following information refers to what data is collected on a daily basis and how that data is used to analyze sewer collection system performance, structural and maintenance related problems, crew productivity and overall success of maintenance and capital improvement programs.

### 9.1. Data Collection Logs

The WWTPPO schedule and record all collection system maintenance activities and to maintain an inventory and parts list of all critical components of the pump stations. A paper map system of the sanitary sewer is maintained by the Village consulting Engineer and updated system maps are produced regularly for maintenance personnel.

### 9.2. CMOM Implementation & Effectiveness Measurements

The Village Administrator and WWTPPO review the implementation and effectiveness of the CMOM on an annual basis. This review is based upon the eleven elements of this CMOM. The next table lists each component and how CMOM implementation and effectiveness is measured. A report is prepared annually responding to each measurement for records and for action. If the answer to any of these measurements/questions is NO then the report will identify the problem, propose resolution options, make recommendations, and provide a resolution completion dates.

SSMP Component	Standard Measurements (Section Reference)
Goals (Element 1)	Are all of the goals (1) identified in the SSMP appropriate and accurate?
Organization (Element 2)	Is organization chart (2.2) and SSMP & SSO responsibility (2.3) appropriate and current? Appendix A
	Is the chain of communication (2.4) for report and responding to SSO appropriate, accurate, and current?
Legal Authority (Element 3)	Does the SSMP contain excerpts from the current Village of Paddock Lake Municipal Code documenting the Village's legal authority to:
	Prevent illicit discharges? (3.2)
	Require proper design and construction of sewers and connections? (3.3)
	Ensure access for maintenance, inspection, or for repairs for portions of the laterals owned or maintained users of sewer system (3.4)
	Limit discharges of fats, oils and grease? (3.5)
	Enforce any violation of its ordinance? (3.6)
	Were there any difficulties enforcing sewer issues that did or could result in SSOs? Such issues could include FOG, laterals, sewer



	connections, assessment fee collection. Explain how the legal authority of the Village was or will be enhanced.
Operations & Maintenance (Element 4) O&M (4.2)	Are the wastewater collection system maps complete, current and sufficiently detailed? (4.1)
	Were there any SSOs that were preventable with proper O&M
	Was the O&M scheduled followed as written?
	Does the SSMP describe current preventative maintenance activities, list all hot spots for prioritizing the cleaning of sewer lines?
	Based on the SSO information are the Village's preventative maintenance activities sufficient and effective in minimizing SSO and blockages?
Rehabilitation and Replacement Plan (4.3)	Were there any SSOs that were preventable due to incomplete CIP scheduled projects?
	Was the CIP followed and if not then should the CIP be revised?
SSMP Training (4.4)	Are all sewer staff members and emergency response personnel aware of and familiar with the SSMP?
	Has sewer staff received the appropriate training for their position?
	Are the training records current and complete?
Equipment and Replacement Parts (4.5)	Does the SSMP list the major equipment and parts needed for daily O&M and for emergency collection system repairs, response including during pump station failure?
Design & Performance Standards (Element 5)	Does the SSMP contain current design and improvement standards for the installation of new sanitary sewer systems, lift stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer system?
Over flow and Emergency Response Plan (Element 6)	Are the spill response procedure up to date?
	Are all sewer staff members and emergency response personnel and contractors trained on SSO response procedures?
	Is the SSO external reporting requirements and contact information current?
	Are the one stop and other emergency contact information complete and current?
	Did responders to SSOs during the past year respond according to procedure and do the procedures need improvement?
FOG Control Program (Element 7)	Were there any FOG related spills or near spills and if so is any additional enforcement, education, or preventative measures required?
	Were all sources of FOG inspected during the year?
	Is the current FOG Control Program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?

System Evaluation and Capacity Assurance Plan (Element 8)	Is there evidence that system capacity at any location is deficient due to system demand? (For example, were there any SSOs or near SSO that could not be explained by blockages or failures of the pipes or pump stations?)
	Does the Village capital improvement program (CIP) account for all known major deficiencies that cannot be corrected with the O&M budget?
	Are all CIP project on schedule for budgeting and construction?
Monitoring, Measurement and Capacity Assurance Plan (Element 9)	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?
	Is the Village able to sufficiently evaluate the effectiveness of SSMP elements based on relevant information?
	Do the implementation and effectiveness measurement questions in this list need to be added to or enhanced?
SSMP Program Audits (Element 10)	Were the results of prior SSMP Audits recorded in a written report?
	Were the actions recommended in the SSMP Audit report(s) implemented?
Communication Program (Element 11)	Does the Village communicate with the public and other agencies about the development and implementation of the SSMP and continue to address any feedback
	Is the Village website updated with the most recent communications as required by the program?

**9.3. Measuring Preventative Maintenance Success**

The report outlined in Section 9.2 is used to measure the success of the preventative maintenance program.

**9.4. CMOM Element Updates**

The CMOM will be formally reviewed and as necessary, updated at minimum every five year to reflect changes to how the Village manages its wastewater collection system, perform system analysis, and make other changes require by the State. The updated CMOM will be filed with the State every five years as required by the Village’s permit. The next required CMOM update and filing is December 31, 2018.

The report outlined in Section 9.2 is used to determine incremental updates to the CMOM.

**9.5. SSO Reporting**

In addition to the reporting requirement of Section 9.3, the PWD will prepare annually a report detailing every SSO incident and comparing the current year SSOs with the previous five years or more. A list of the past year’s SSO incident shall include location, date, frequency, and volume.

The SSOs will be reported with the following structure:

**NUMBER OF SSOs**

Size of SSO (gallon)	Current year	Previous year	.....Fifth year
Greater than or equal to 1,000			
From 100 to 999			
From 10 to 99			
Less than 10			
Total			

**TOTAL VOLUME (gal)**

	Current year	Previous year	....fifth year
Total volume reaching waters of the State			
Total volume contained and returned to sewer system			
Total volume contained but not reaching waters of the State (everything else)			
Total			

**CAUSES OF SSOs (current year)**

	# in Main	# in Lateral
Blockages		
Roots		
Grease		
Debris		
Debris from laterals		
Vandalism		
Animal Carcass		
Construction Debris		
Multiple Causes		
Subtotal from Blockages		
Infrastructure Failure		
Inflow & Infiltration		
Electrical Power Failure		
Flow Capacity Deficiency		

Natural Disaster		
Bypass		
Cause unknown		

The tables above do not include SSOs that occurred from private sewer service laterals. The property owners are responsible for the condition and the operation of those sewer service laterals.

## 10. CMOM Program Audits

The Village is required to conduct internal audits at least every two years. All audit reports must be kept on file. The audits must, at a minimum, evaluate the effectiveness of the CMOM and the Village's compliance with its own CMOM. More specifically, the audit must identify any deficiencies in the collection system and document the actions taken to correct them. The Village will typically conduct the audits with Village Staff. The Village may choose to include representatives from other agencies and/or independent contractors to perform portions of or an entire audit. At a minimum, the Audits will be based up the CMOM Implementation and Effectiveness Measurements provided in Section 9.2.

## 11. Communication Program

The Waste Water Department realizes the importance of clear and informative communication with our residential and commercial customers. The primary method of communication is through the Village's web site, the address of which is [www.paddocklake.net](http://www.paddocklake.net). The Village communicates information about this CMOM and its preventative maintenance in the following manner and to the following groups:

### FOG Program

As defined in Section 7, the Village will communicate the FOG program to business and agencies that the Village has determined are sources of FOG. The Village will provide FOG related fliers and discuss the program to each business during semiannual FOG intercept or inspections and more frequently as needed.

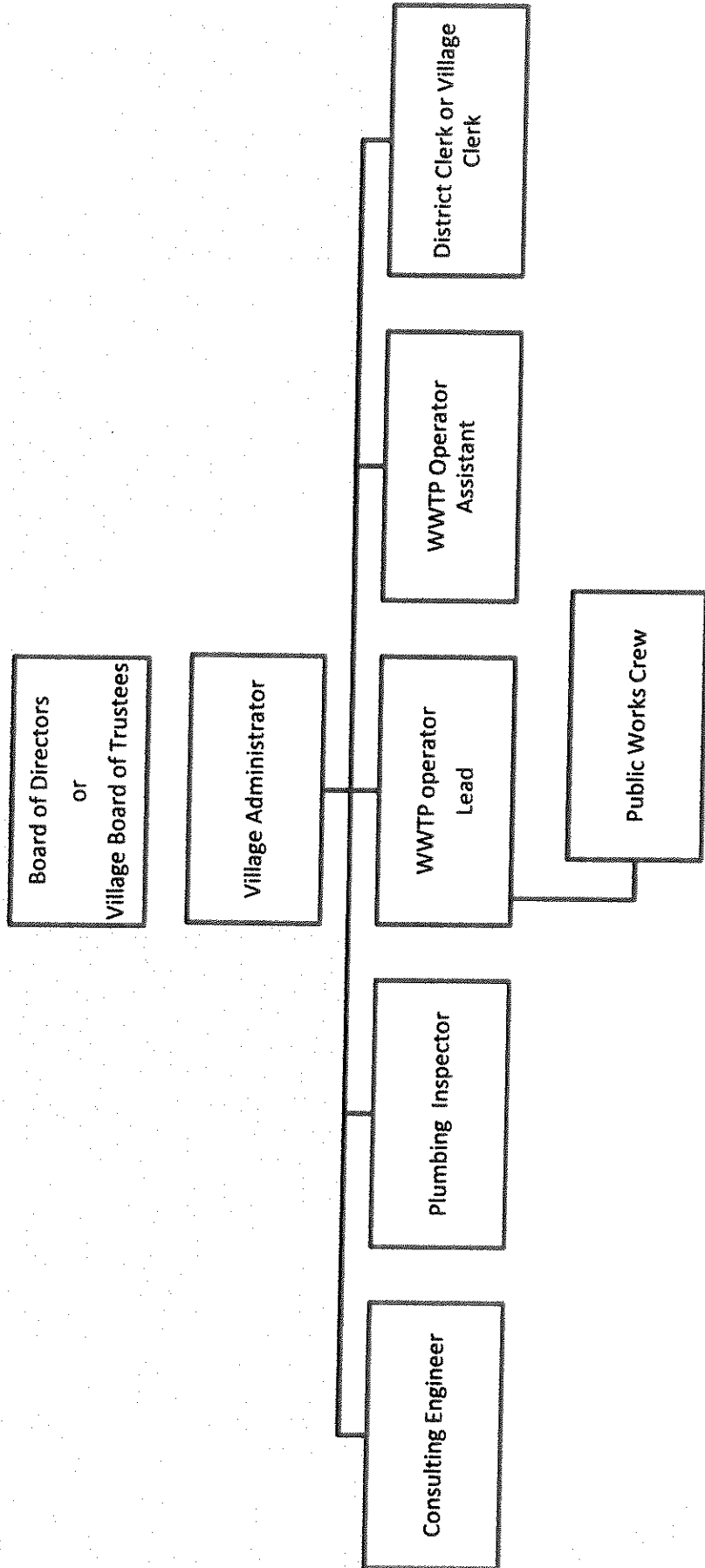
### Sewer Lateral Maintenance

The Village communicates to all its residents and businesses regarding their responsibility and ownership of the sewer laterals connected to the Village's waste water collection system by way of the Village's web site listed above. This information includes this CMOM, lateral ownership responsibility, who to contact during an emergency such as an SSO, latest design and connection requirements, and other sewer related subjects.

### SSMP Performance

Following the internal audits of the CMOM as defined in Section 10, the Village will post the audit report in its website listed above. Anyone wishing to provide input regarding the CMOM, the audit, or other related subject is welcome to attend the regularly scheduled Village Committee of the whole (2<sup>nd</sup> Tuesday of the month) or Village Board meeting on the (3<sup>rd</sup> Wednesday of the month). The dates and times of these meeting are provided on the website.





**Board of Directors or Village Board** – The Village Board acting as commission of the Village Sanitary Sewer Utility District shall have all the powers and duties provided in Chapter 66 of Wisconsin State Statutes.

**Village Administrator** – Establishes policy, plans strategy, leads staff, allocates resources, delegate's responsibility, authorizes outside contractors to perform services and serves as the public information officer

**Consulting Engineer** – Assists the Village Board and Village Administrator in collection system planning, assists in managing capital improvements.

**Plumbing Inspector** – Ensures that the CMOM Plans pretreatment program is followed by sanitary sewer users, also acts as enforcement officer of Village CMOM Plan as well as Village and State plumbing codes.

**Wastewater System Operator** – Operates and manages wastewater treatment plant, manages field operations and maintenance activities, provides relevant information to agency management, prepares and implements contingency plans, leads emergency response, investigates and reports SSO's.

**Public Works Crew** – Staff preventative maintenance activities, mobilizes and responds to notifications of stoppages and SSO's mobilize sewer cleaning equipment, bypass pumping equipment, and portable generators.

**Clerk of the District** – Subject to such State statutory requirements and such ordinance provisions as the village may make.

**2019/2020 (Nov. 2019)**

**Utility District Commission (Village Board):**

**term:**

Chairperson- Terry Burns	262-206-2644	2019-2021
Commissioners		
Barbara Brenner	262-843-2550	2018-2020
Kathy Christenson	262-843-2162	2019-2021
Robert Spencer	262-843-8726	2018-2020
Gary Kaddatz	262-843-2616	2019-2021
Gloria Walter	262-843-3916	2018-2020
Scott Garland	262-843-2713	2019-2021

**Village Administrator:**

Tim Popanda	262-843-3617 262-206-8113	appointed
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Consulting Engineer:

Baxter & Woodman (Mark Kolczaski) 262-763-7834 appointed

Wastewater Operator:

Gary Meyer 262-206-9146 appointed  
Darin McKinney 262-620-4511 appointed

District Clerk:

Michelle Shramek 262-843-2713 appointed

Plumbing Inspector:

Tim Popanda 262-843-3617 appointed

Public Works Crew:

Greg Glaze 262-206-8053 appointed  
Darin McKinney 262-620-4511 appointed  
Mike Schoenke 262-818-6519 appointed

Contracted Vendor:

Pat's Sanitary 262-537-4988 Vendor  
262-949-2409  
Wanasek Corp. 262-763-3561 Excavation  
Crane Engineering 920-850-3100 Lift Station  
Xylem Pumps Lift Stations  
Cummins Power 651-286-2079 Generator  
Fox Plumbing 262-939-3289 Plumber  
Pieper Electric 262-658-1888 Electrician  
We Energies 800-662-4797 Utility  
Diggers Hotline 800-242-8511 Locates  
Village Id # 69894



**APPENDIX B**  
**VILLAGE OF PADDOCK LAKE**  
**SANITARY SEWER OVERFLOW PLAN**  
**RESPONSE PLAN**

**PURPOSE:**

The purpose of the Sanitary Sewer Overflow response plan is to ensure that every reported and confirmed SSO is adequately addressed to ensure the effects of the overflow are minimized with respect to impacts to public health. In addition to minimizing the effects of SSO'S, this response plan ensures that Village personnel follow established guidelines in responding to, stopping, containing, cleaning and decontaminating SSO's and follow program reporting procedures.

**BACKGROUND:**

The Village is committed to eliminating preventable SSO's in their collection system. This plan will provide procedures to respond to SSO's. The CMOM plan requires a Response Plan. The plan include provisions to ensure safety and public health are protected and notification and reporting is made to the Wisconsin DNR.

The plan presents strategy for the Village to mobilize labor, materials, tools, and equipment to correct or repair any condition which may cause or contribute to an unpermitted discharge. The major components of the plan are:

1. Identification of known or potential overflow sites
2. Receipt of information regarding a potential SSO
3. Dispatch
4. Overview mitigation, containment and cleanup
5. Notification and documentation
6. Cause and failure analysis

**IDENTIFICATION OF OVERFLOW SITES:**

There are three (3) gravity overflow sites in the Village collection system as listed below.

**69<sup>th</sup> Street lift station-** A small lift station in design that is often inundated with ground water Influx and Infiltration.

**High school lift station-** This lift station receives wastewater from the Village business district and the regional high school. Within this business district exists four (4) restaurants.

248<sup>th</sup> Ave lift station- The largest lift station in the Villages collections system, this station is subject to power failures and historically had pumping and notification deficiencies.

#### RECEIPT OF INFORMATION REGARDING AN SSO:

An overflow may be detected by Village staff or by others. The Village is responsible to respond to any calls or reports of a potential SSO and to provide immediate response to investigate. In addition to reported SSO's Village staff will respond to any reported blockage in sewer laterals, Village staff will investigate reported blockage to confirm that the cause is not Village managed collection system.

All calls are routed to the WWTP during work hours and to the Kenosha County Sheriff's Dept. after hours. The person taking the call will document the concern or complaint and contact the WWTP or Village Administrator. The following information should be obtained and included:

- Time and date call was received
- Callers name and phone number
- Specific location of problem
- Description
- Other information that could assist the Village to quickly locate, assess and correct SSO

#### DISPATCH

1. Upon notification that there could be an overflow or a blockage the DPW Administrator will dispatch a designated employee to investigate the alleged problem. This person shall investigate and confirm it there is an SSO or a blockage that could lead to an SSO.
2. If a SSO or blockage is confirmed then it must be reported. See No. 7 in this plan for reporting.
3. Determine the cause of the overflow or blockage, (e.g. high flows, sewer line blockage, sewer line break, lift station failure, etc.)
4. Estimate quantities of flow of the overflow.
5. Estimate overflow quantities based on time and volume
  - a) Note date and time start \_\_\_\_\_
  - b) Note date and time stopped \_\_\_\_\_
  - c) Overflow- circle approximate flow depth  $\frac{1}{4}$  pipe,  $\frac{1}{2}$  pipe  $\frac{3}{4}$  pipe or full pipe
  - d) Or if notified and it appears that this overflow has been occurring for a while – estimate start time
6. Document time that SSO is contained
7. All overflow quantities must be reported to the DNR
8. If using a portable pump document actual start and stop times. Document pump capacity and calculate gallons pumped.

## OVERFLOW MITIGATION, CONTAINMENT AND CLEANUP:

The following procedures will be followed to clean-up the SSO.

1. Identify the destination of the overflow (storm sewer, street, specific location, creek, lake, wetland)
2. Secure the area to prevent contact by members of the public until the SSO has been addressed and cleaned.
3. Take immediate steps to stop or minimize the impacts of the SSO,
  - a. Relieve Village sewer blockage by cleaning the sewer
  - b. Install portable pumps at manhole and pump to another sewer manhole if possible
  - c. Call other emergency contractors or other municipalities for assistance.
4. Request additional personnel, materials, supplies, or equipment that will expedite and minimize the impacts of the overflow.
5. Cleanup of the overflow site shall be completed as soon as possible.
  - a) Secure the site-route traffic around the SSO if necessary and possible.
  - b) Take photos of the SSO.
  - c) Where practical factor the excess SSO, thoroughly flush the area and clean any sewerage or wash-down water. Solids and debris may be flushed, swept, picked up or transported for proper disposal.
6. Notification to stakeholders needs to be completed for all SSO'S. The Village Administrator shall be notified as soon as possible.

## NOTIFICATION AND DOCUMENTATION:

- Wisconsin DNR
  - Village Administrator
  - Public notification
  - Others
1. Village- All overflows shall be reported immediately to the Village Administrator.
  2. Public Notification- The Village Administrator will work with the WWTP operator to notify the public. This may include a posting on the Village website, a press release to West of the I, Kenosha News, Paddock Lake Report.
  3. Other Notifications- All SSO's that impact other municipalities will be notified.
  4. Public Health Department- The Kenosha County Dept. of Health shall be notified of all SSO's.

**ROOT CAUSE AND FAILURE ANALYSIS:**

All SSO's need to be investigated to determine the cause. A root cause failure analysis form is included in this appendix to assist in determining the cause of the SSO.

**APPENDIX C**  
**VILLAGE OF PADDOCK LAKE**  
**CAPACITY ASSURANCE PLAN**

**CAPACITY ASSURANCE:**

The wastewater collection system currently has adequate capacity and a capacity plan is not required at this time.

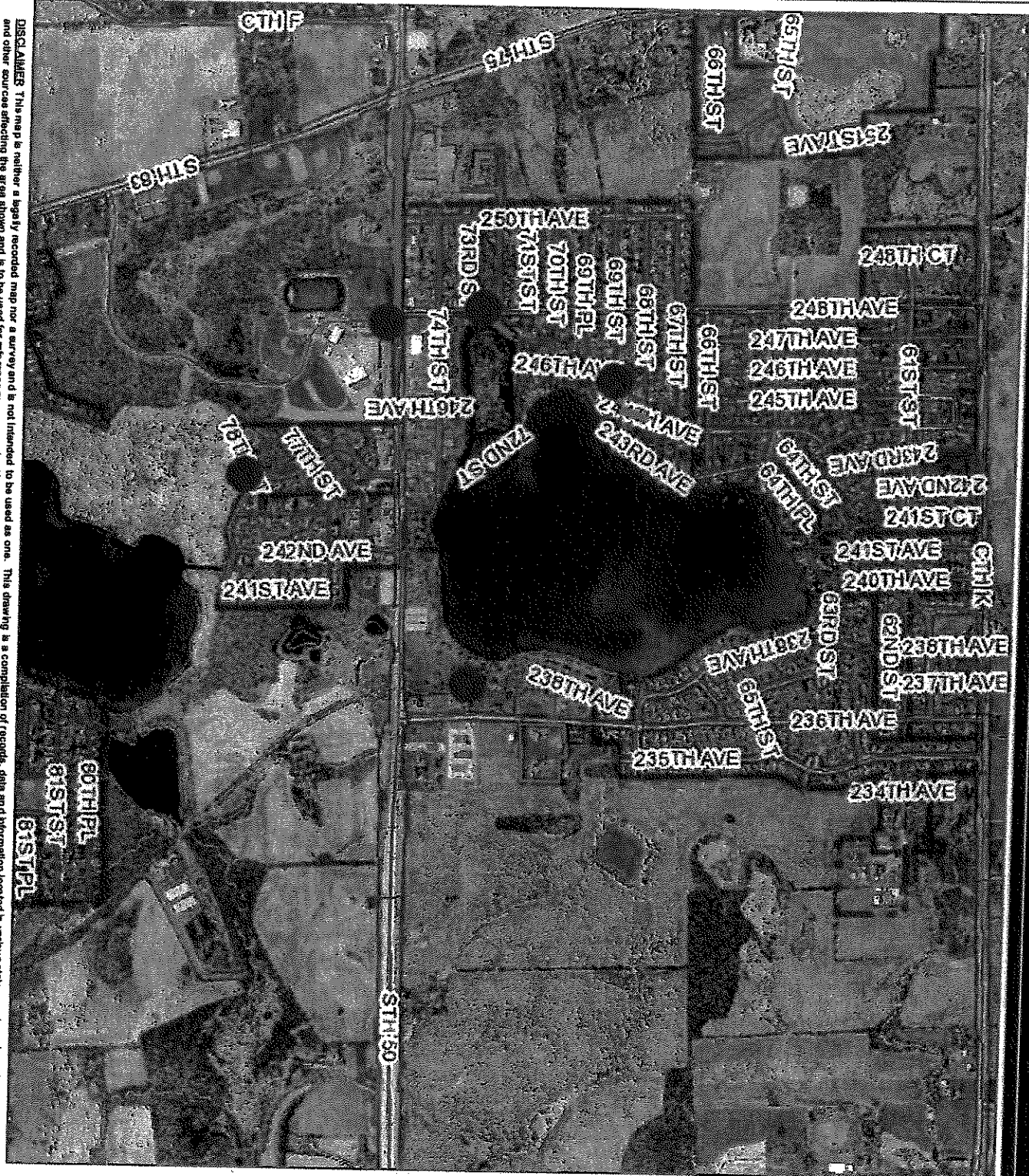
If a capacity assurance plan is required in the future, the following documents will be provided:

- Current and up-to-date sewer system 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 operation and maintenance manuals.

The Village will identify the following areas within the sewer collection and process system.

- Areas with flat sewers.
- Areas with surcharging.
- Areas with bottlenecks or constrictions.
- Areas with chronic basement backups or sanitary sewer overflows.
- Areas with excess debris, solids, or grease accumulation.
- Areas with heavy root growth.
- Areas with excessive infiltration and inflow.
- Sewers and manholes with severe corrosion.
- Sewers with severe defects that effect flow capacity.
- Adequacy of capacity for new connections.
- Lift station capacity and/or pumping problems.
- Wet weather relief points or overflow structures.

**SSO HOT SPOTS**



**Legend**

- Street Centerlines
- Right-of-Ways
- Water Features
- Condominiums
- Subdivisions
- == Municipal Boundaries
- Lots



1 inch = 1,326 feet

Date Printed: 12/9/2019

**DISCLAIMER:** This map is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, data and information located in various state, county and municipal offices and other sources affecting the area shown and is to be used for reference purposes only. Kenosha County is not responsible for any inaccuracies herein contained. If discrepancies are found, please contact Kenosha County.

# **2019-2020 – CMOM PLAN AUDIT**

## **CMOM AUDIT CHECK LIST – Conducted November of 2019**

Each of the eleven CMOM Plan elements and their associated requirements is represented in the checklist below. Either Yes or No is provided for each question. If a Yes is indicated, then the requirement is both compliant and current. If No is indicated, then an update/change is needed, and a comment is made under remarks.

### **Definitions and Acronyms:**

BMP- Best Management Practices

CIP- Capital Improvement Plan

CMOM Plan- Capacity Management Operation and Maintenance Plan

FOG- Fats Oils and Grease

SSO- Sanitary Sewer Overflow

WDNR- Wisconsin Department of Natural Resources

		YES	NO	REMARKS
<b>ELEMENT 1 -- MISSION, GOALS AND OBJECTIVES</b>				
A.	Are the mission, goals and objectives stated in the CMOM still appropriate and accurate?	x	<input type="checkbox"/>	
<b>ELEMENT 2 -- ORGANIZATION</b>				
A	Is the District organizational Chart current?	x	<input type="checkbox"/>	The list reflects the new Trustees and terms
B	Is the chain of communication for SSO response and reporting current?	x	<input type="checkbox"/>	Amend to include report to WDNR
C	Is the contact information for key District personnel current?	x	<input type="checkbox"/>	Added contractors that may be called upon



**ELEMENT 3 – LEGAL AUTHORITY**

Does the CMOM Plan contain excerpts from the current Paddock Lake's Sanitation District's Ordinance Code documenting the District's legal authority to:

<b>A</b>	Prevent illicit discharge?	X	<input type="checkbox"/>
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		YES	NO	REMARKS
<b>B</b>	Require proper design and construction of sewers and connections?	X	<input type="checkbox"/>	
<b>C</b>	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District?	X	<input type="checkbox"/>	
<b>D</b>	Limit discharges of fats, oil and grease?	X	<input type="checkbox"/>	
<b>E</b>	Enforce any violations of its sewer ordinances?	X	<input type="checkbox"/>	2019 saw three (3) SSO's related to FOG entering the collection system. The illicit discharge was found and fines and penalties were assessed to the property owner.

**ELEMENT 4 – OPERATIONS AND MAINTENANCE**

**MAPPING**

<b>A</b>	Does the CMOM Plan reference the current process and procedures for maintaining the District's wastewater collection system maps?	x	<input type="checkbox"/>	The District will be transitioning to a GIS mapping system
<b>B</b>	Are the District's wastewater collection system maps complete, current, and sufficiently detailed?	x	<input type="checkbox"/>	Yes, in paper format currently
<b>Resource and Budget</b>				
<b>C</b>	Does the District allocate sufficient funds for the effective operation, maintenance and repair of the wastewater collection system and is the current budget structure documented in the CMOM Plan?	x	<input type="checkbox"/>	The District will allocate funds for collection system maintenance and repairs
<b>Preventative Maintenance</b>				
<b>D</b>	Does the CMOM Plan describe current preventative maintenance activities and the system for prioritizing the cleaning of sewer lines?	x	<input type="checkbox"/>	The district is in its fourth year of a five year contract to clean and televise the collection system.
<b>E</b>	Based upon information in the annual SSO report, are the District's preventative maintenance activities sufficient and effective in minimizing SSOs and blockage?	x	<input type="checkbox"/>	In 2019 the District experienced (4) SSO's as a result of FOG and equipment failure.
<b>Rehabilitation and Replacement</b>		<b>YES</b>	<b>NO</b>	<b>REMARKS</b>
<b>F</b>	Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the CMOM Plan?	x	<input type="checkbox"/>	The system CIP will include repairs of collection system found during televising.
<b>Maintenance Equipment</b>				
<b>H</b>	Does the CMOM Plan list the major equipment currently used in the operation and maintenance of the collection system and document the procedures of inventory management?	x	<input type="checkbox"/>	The utility district has replaced existing alarm and notification equipment.
	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	x	<input type="checkbox"/>	The District has arranged for a list of replacement parts to be forwarded to vendors.

**Training and Certification**

I	Is adequate training being provided to staff to maintain a knowledgeable and safe workforce?	x	<input type="checkbox"/>	The District provides safety training and has begun a cross training program with Public Works Staff
J	Are maintenance personnel properly certified by WDNR to perform their work and is this documented in the CMOM Plan?	X		The Utility District has two (2) licensed WWTP operators.

**ELEMENT 5 – DESIGN AND CONSTRUCTION STANDARDS**

A	Does the CMOM Plan contain current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	x	<input type="checkbox"/>	The Districts consulting engineers maintain and enforce standards.
B	Does the CMOM Plan document current procedures and standards for inspecting and testing the installation of new sewer pumps and other appurtenances and the rehabilitation and repair of existing sewer lines?	x	<input type="checkbox"/>	

YES NO

REMARKS

**ELEMENT 6 – OVERFLOW EMERGENCY RESPONSE PLAN**

A	Is the District's SSO and Backup Response Plan, that establishes procedures for emergency response, notification and reporting, effective and current?	x	<input type="checkbox"/>	The WDNR requirement to place a legal notice to paper will be added to the CMOM Plan.
B	Has the District staff been properly trained on the procedures of the Sanitary Sewer Overflow and Backup Response Plan?	x	<input type="checkbox"/>	Staff conducts training annually
C	Based on recent experience, do the Sanitary Sewer Overflow and Backup Response Plan provide effective guidance in handling SSOs and safeguarding public health and the environment?	x	<input type="checkbox"/>	

**ELEMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM**

A	Does the Fats, Oils and Grease (FOG) Control Program include efforts to educate the public on the proper handling and disposal of FOG?	x	<input type="checkbox"/>	The District has published in the Village newsletter information about FOG.
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<b>B</b>	Does the District's FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measure to minimize these blockages?	x	<input type="checkbox"/>	Collection system "Hot Spots" for FOG will be inspected quarterly and monthly
<b>C</b>	Are the requirements for grease removal devices, best management practices (BMP), record keeping, and reporting established in the District's FOG Control Program?	x	<input type="checkbox"/>	
<b>D</b>	Does the District have sufficient legal authority to implement and enforce the FOG Control Program?	x	<input type="checkbox"/>	Enforcement is provided by Village Ordinance and Wisconsin Plumbing codes
<b>E</b>	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	x	<input type="checkbox"/>	The District will increase public education to single family residents on proper disposal of FOG.

		YES	NO	REMARKS
<b>ELEMENT 8 – CAPACITY MANAGEMENT</b>				
<b>A</b>	Has the District evaluated the hydraulic deficiencies in the system, established sufficient design criteria and recommend both short- and long-term capacity enhancement and improvement projects?	<input type="checkbox"/>	x	The District last evaluated the collection system in 2004, The District anticipates conducting a multi-year capacity and modeling study beginning 2020/2021.
<b>B</b>	Does the District's Capital Improvement Program (CIP) establish a schedule of approximate completion dates for both short- and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	<input type="checkbox"/>	x	The District will use the capacity study to create a 5-year CIP.

**ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS**

<b>A</b>	Are the performance parameters shown for each of the CMOM Plan elements adequate for monitoring the effectiveness of each CMOM Plan element?	X	<input type="checkbox"/>	More than adequate for small collection system.
<b>B</b>	Are the methods for measuring each of the performance parameters sufficient to properly evaluate the success of each CMOM Plan element?	X	<input type="checkbox"/>	
<b>C</b>	Does the description of the process for modifying the CMOM Plan continue to be valid?	X	<input type="checkbox"/>	

**ELEMENT 10 – SSMP AUDITS**

<b>A</b>	Was the CMOM Plan Audit performed every two years beginning on January 2015 and kept on file per WDNR requirements.	X	<input type="checkbox"/>	Audit was conducted in 2018 and November 2019
<b>B</b>	Will the CMOM Plan Audit be made public through the District's website?	X	<input type="checkbox"/>	The District will share the audit with the Village Board, and post on the website along with posting on the bulletin board.
<b>C</b>	Has the CMOM Plan Audit in its current form provide for its thorough review and continues to promote continuous improvement?	X	<input type="checkbox"/>	

**ELEMENT 11 – COMMUNICATION PROGRAM**

		YES	NO	REMARKS
<b>A</b>	Is the contact person listed for communication of the CMOM Plan current?	X	<input type="checkbox"/>	
<b>B</b>	Does the District's website contain the most current CMOM Plan?	<input type="checkbox"/>	X	The SSMP will be updated and posted.
<b>C</b>	Do the District's stakeholders have the most current CMOM Plan?	X	<input type="checkbox"/>	

D	Does the CMOM Plan document current outreach efforts?	X	<input type="checkbox"/>
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2019

## NOTICE

If alarm is sounding or Strobe is flashing on this station

Please notify the Village of Paddock Lake by calling

**262-843-2713** during working hours and the Kenosha County Sheriff

For after hour alarms at **262-843-2371**

**SANITARY LIFT STATION No. 1,  
7210-248<sup>TH</sup> Ave.**

This proposed reflective sign is to be 18 inches tall and 24 inches wide, white background with black letters and boarder that is red. The chart below lists the information required and number of signs requested.

<b>Lift station description and No.</b>	<b>Address</b>	<b>Number of signs</b>
Sanitary Lift Station No.1	7210-248 <sup>th</sup> Ave.	1
Sanitary Lift Station No.2	24801-75 <sup>th</sup> St. (STH 50)	2
Sanitary Lift Station No.3	24501-69 <sup>TH</sup> St.	2
Sanitary Lift Station No.4	24401-78 <sup>th</sup> St.	1
Sanitary Lift Station No.5	7136-236 <sup>th</sup> Ave.	1

18" x 24"

# **NOTICE**

**If alarm is sounding or Strobe  
is flashing on this station:**

**Please notify the Village  
of Paddock Lake by  
calling: (262)843-2371**

**SANITARY LIFT STATION #1  
7210-248th Ave.**

12" x 18"



**GOLF CART  
TRAFFIC IS  
PROHIBITED**

**VIOLATORS WILL BE TICKETED  
BY ORDER OF THE VILLAGE BOARD**



## LIFT STATION PROJECT PLAN

To reduce the number of future Sanitary Sewer Overflows (SSO) and component failures at the Village of Paddock Lake collection system lift stations, Village staff requests permission from the Village Board to replace and upgrade the following aged components in each of the four older lift stations:

### PUMP CONTROL

Description	UNIT PRICE	TOTAL 4 L.S.
Install new air bubblers 2/L. S	\$395	\$3,160
Replace all air hoses and air dryer filters, 2 sets per station	\$85	\$340
Replace pumps control panel electric circuit breakers, 2 per station	\$250	\$1,000
Install lightning serge protection on panel control circuitry	\$850	\$3,400
Replace cooling fan and heaters one each per L.S.	\$270	\$1,080
<b>Project totals</b>		<b>\$8,980</b>

### ALARM CONTROL

Description	Unit Price	Total 4 L. S
Replace auto-dialers, one in each L.S.	\$3,900	\$15,600
Install additional high-water float/transducer, one per L.S.	\$1,560	\$6,244
Replace Verizon phone modem, one per L.S. (COMPLETE)	\$20.00	COMPLETE
Replace warning light with high intensity white strobe, one per L.S.	\$155	\$620
Replace audible horn with intermittent 165db horn, one per L.S.	\$135	\$540
<b>Project Totals</b>		<b>\$23,044</b>

