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LAKE COUNTY PUBLIC WORKS

CAPACITY, MANAGEMENT, OPERATIONS AND MAINTENANCE (CMOM) PROGRAM

COUNTY GOVERNMENT

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Section 1. -Introduction

Sec 1.1 Background and Information

This document was created for the purpose of preparing a CMOM Program Manual for use by Lake County Public Works.

Lake County through the Public Works Department, owns, operates and maintain three wastewater reclamation facilities, seven sanitary sewer systems, six pump stations and ninety lift stations throughout the county. Public Works also provides wholesale sewer service, by contract, to various communities, municipalities and portions of municipalities. Public Works provides essential water and wastewater service for over forty percent of the county's residence. This CMOM program addresses the service areas covered by the treatment and collection systems.

Sec. 1.2 Definitions

The following definitions pertain to this document:

1. CMOM means Capacity, Management, Operations, and Maintenance, a program to efficiently operate and maintain collection system assets to minimize performance failures and overflows.

2. Collection System means the sanitary sewer system including sanitary sewers, combined sewers, manholes, pumping stations and associated equipment.

3. Critical Structures means the system components that are essential to the operation of the sanitary sewer collection system. Failure of critical structures would impact critical customers and/or a large number of customers.

4. Critical Customers means the customers such as hospitals, schools, municipal facilities (fire station, police station), nursing homes, etc. where maintaining service is a high priority.

5. Infiltration means water other than wastewater that enters the collection system from the ground through sources such as defective pipes, pipe joints, connections, or manholes.
6. Inflow - is water other than wastewater that enters the collection system from the ground through such sources as roof drains, sump pumps, yard drains, foundation drains, manhole covers, cross connections, and other surface water drainage.

7. I&I is the abbreviation for Infiltration & Inflow.

8. Sanitary Sewer Overflow (SSO) means a condition whereby untreated wastewater from the collection system is discharged to the environment prior to reaching the treatment facility. A SSO event can be caused by collection system failures, significant rainfall events, large sources of I&I, and collection system blockages.

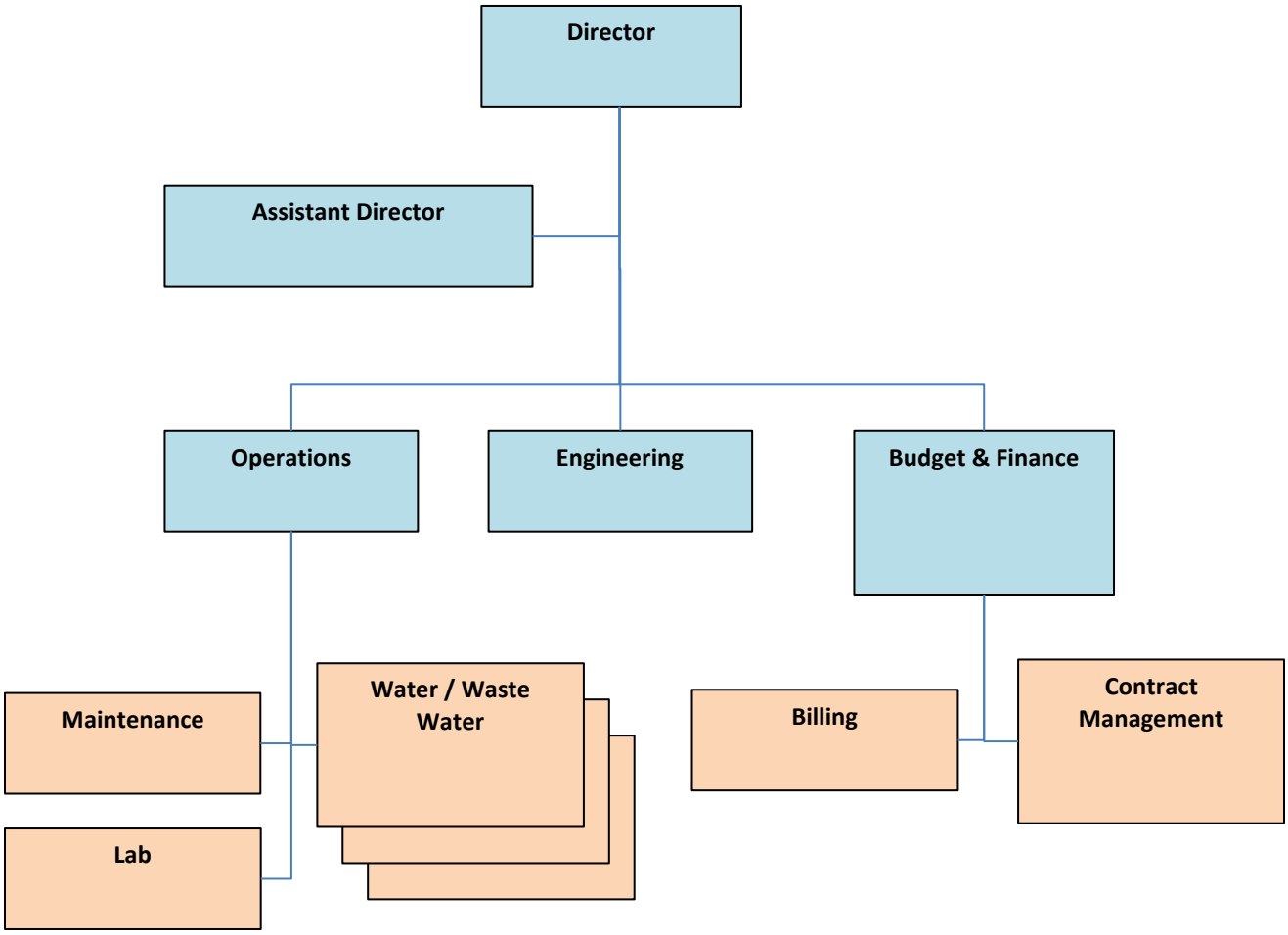
9. IEPA is Illinois Environmental Protection Agency.

10. NPDES is National Pollutant Discharge Elimination System.

11. SSES is Sanitary Sewer Evaluation Survey.

Sec. 1.3 Organizational Structure

a. Lake County Public Works Organizational Chart



Sec. 1.4 Team Responsibilities (See Appendix G)

The Director

The director manages the overall department and provides the connection to the County Administrator's Office and elected officials. To ensure success of the program the director's job will include, but is not limited to, the following:

- Review and approval of Capital Improvement Programs
- Review and approve communication released to elected officials, the media and the general public.
- Coordinate with other agency public information officers to ensure that information released is consistent along jurisdictional lines
- Update the County Administrator
- Communicate with the Elected Officials
- Give final authorization for Public Notice
- Give immediate purchase/rental of large equipment authorization
- Give approval for use of outside contractors
- Approve critical decisions in the field
- Communicate with and provide guidance from the Engineering Department

Assistant Public Works Director

The assistant director provides support to the overall department. To ensure success of the program the director's job will include, but is not limited to, the following:

- CIP Development
- Safety Program Manager
- Communications with the General Public
- Notification and Coordination with the Illinois Emergency Management Agency (IEMA): 847-377-7100 - 24-hour: 847-549-5200
- Coordination with Federal authorities (FEMA, FBI, etc.) based on the magnitude of the event
- Coordination with Central Lake County Joint Action Water Agency (CLCJAWA)
- Coordination with other Towns/Villages and any other state emergency agency
- Perform or delegate the responsibilities of any unfilled Command Structure positions
- Provide the PW Dispatcher with contact information, status updates, and the proper response to telephone calls from the media and the general public
- Ensure that all appropriate local, state, and federal agencies have been notified

Operations Manager

The operations manager oversees the operation and maintenance divisions. To ensure success of the program the director's job will include, but is not limited to, the following:

- Proper maintenance of the collection system and treatment plants
- Proper operations of the treatment plants, lift and pump stations
- Tracking of problem areas
- Development and distribution of reports
- Communication with IEPA (if the emergency involves the release of potentially hazardous materials to the environment) 217-782-3637

- Coordination of all Public Works field operations
- Ensures that the Public Works Incident Command Structure (in the field) is sufficiently staffed
- Arrange for documentation of events and information, including photo and video recording, for purposes of internal evaluation, insurance processing, regulatory agency compliance and legal records
- Document all significant actions and information
- Conduct an investigation into the incident and prepare reports on the incident for inclusion into the official record
- Conduct an on-going assessment of Public Works activities; check on the progress of assigned tasks

Maintenance Supervisor

The maintenance supervisor oversees the maintenance and repairs for the department. To ensure success of the program the director's job will include, but is not limited to, the following:

- Preventative maintenance and repairs
- Troubleshooting and inspections
- Electrical repairs
- Assistance with emergency equipment
- Coordination with the Division Supervisor
- ComEd notification
- Coordination with maintenance staff
- EMA notification for additional generators, if necessary
- Coordination with outside contractors, if necessary
- Monitor the condition of Public Works operating systems and equipment.
- Work with Field Command to restore or maintain service
- Document all significant actions and information
- Monitor clean-up and waste disposal activities

Engineering

The engineering supervisor provides/procures all the general engineering services for the department. To ensure success of the program the director's job will include, but is not limited to, the following:

- Oversees construction/design plans
- Works with outside engineering companies
- Executes the CIP
- Provides GIS service and Reports
- Provide professional expertise and advice
- Identify potential and actual impacts of the emergency to key systems and specific areas of the system
- Assist Operations in analyzing event impacts to the system
- Utilize LCPW distribution system computer model to analyze conditions, estimate limits, and evaluate options
- Assist in the design and reconstruction of systems to restore operations
- Coordinate with other utilities for the continuation of service
- Organize and direct contractor work as requested
- Provide technical assistance as requested
- Provide damage assessments, cost estimates, and engineering analysis of key system operations

- Supply updated drawings and systems maps

Finance

The finance manager reviews and directs the overall financial activities for the department. To ensure success of the program the director's job will include, but is not limited to, the following:

- Budget preparation
- Procurements and payments
- Collection and billing
- Financial and cost analysis
- Oversees contract negotiations
- Works with Engineering and Operations to ensure resources are procured.
- Provides guidance to secure funding for emergency purchases.

Plant Supervisors

Public Works Division Supervisors

The Public Works service area is divided into three geographical regions (North, Central, South). Each service area has a supervisor and consist of multiple drinking water systems, lift stations, collection systems, and a treatment plant. The supervisor is responsible for the day-to-day operation of the service area/division. To ensure success of the program the director's job will include, but is not limited to, the following:

- Staff safety
- Proper operations for drinking water and sewer systems
- Activation of any site-specific spill plan, if available
- Regulatory reports
- Documentation of all field incidents
- Develop list of problem areas in the system and provide solutions
- Coordination with the Maintenance Supervisor, if necessary
- Coordination with field staff
- Safety of field staff & general public
- Security of Public Works facility
- Safe operation of facility
- Notification to affected utility (Gas, Telephone)
- Field management of the emergency until Lake County EMA, Lake County Sheriff or the appropriate Fire Protection District assumes command
- Provide support to law enforcement, fire department, and medical personnel as needed
- Establish a communication system for the EOC. Arrange for necessary workplace, materials, telephone and staff
- Deliver appropriate Safety Data Sheet(s), schematics, site plans, maps and equipment manuals to the designated Emergency Operations Center (EOC)
- Identify potential hazards created by the incident: water supply contamination, environmental release, damage to operating equipment, etc.
- Document all significant actions and information; complete Chemical Spill Form
- Monitor and report on weather data, if applicable
- Establish and maintain a system for tracking resources (personnel, equipment, tools, etc.) and for obtaining additional resources as needed

Sec. 1.4.1 LCPW Team ROLES Summary

Key Team Members	Primary LCPW Staff	Primary Staff Name	Alternate LCPW Staff
Director	Public Works Director	Rod Worden	Joel Sensenig
Assistant Director	Asst. Public Works Director	Joel Sensenig	Austin McFarlane
Operations	Operations Manager	Austin McFarlane	Phil Speck
Maintenance	Maintenance Supervisor	Josh Casper	Hal Fox
Engineering	Engineer	Brittany Sloan	
Finance	Finance	Andrea Norwood	Tatiana Hebert

Sec. 1.5 Satellite Communities

Lake County Public Works provides sewer services (transport, treatment, and or collection) to several satellite communities (see Appendix N) for list of communities, population and total service).

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Sec. 1.6 CMOM Goals

a. Develop technical recommendations that will, if implemented, successfully mitigate existing and future sanitary sewer system failures including but not necessarily limited to sanitary sewer backups, overflows and loss of sewage treatment efficiency.

b. Incorporate those recommendations in a self-monitoring Program that will improve the management, operation and maintenance of those utilities.

c. Manage the assets of Lake County Public Works inclusive of personnel and equipment to affect a regular maintenance program and to be able to respond to emergency overflows of the system.

d. Through effective management, develop and enforce appropriate ordinances that will help to better manage the performance of the collection system.

Sec. 1.7 CMOM Program Objectives

The objectives outlined below contribute to the overall mission and address issues of health and safety, cost-efficient operation, enhance and optimize collection system performance and compliance with applicable laws.

a. Comply with NPDES Permit requirements
b. Operate a continuous CMOM Program
c. Establish a standard of practice for the operation of the collection system
d. Provide adequate capacity to convey base and peak flows
e. Improve system reliability
f. Improve customer service and third-party notification
g. Identify and reduce sources of inflow/infiltration
h. Maintain annual cleaning and inspection programs
i. Maintain system assets through cost-effective preventative maintenance and rehabilitation programs
j. Improve management, operation and maintenance of collection systems
k. Proactively prevent system failures, SSOs, and system backups
l. Respond to system failures, SSOs, and system backups

In addition to these program objectives, an effective CMOM Program will also:

a. Protect human health
b. Protect property from damage
c. Protect infrastructure investment by properly maintaining the collection system

Sec. 1.8 CMOM Program Components

The CMOM Plan includes the following components:

a. Section 1 Introduction, background, organization and responsibilities
b. Section 2 Management Plan
c. Section 3 Operation and Maintenance (O&M) Plan
d. Section 4 Asset Management
e. Section 5 Capacity Plan
f. Section 6 Response Plan to SSOs and Emergencies
g. Section 7 Sewer/Condition Assessment Program
h. Section 8 Communication Plan
i. Section 9 Pretreatment Program (See Reference Ordinance)
j. Section 10 (FOG) Fats, Oils, and Greases (See Sewer Use Ordinance)
k. Section 11 Safety (See LCPW Safety Policies)
l. Section 12 Annual CMOM Review
m. Appendices Standard Forms and Documents

Section 2. – Management Plan

Sec. 2.1 Background and Information

The Management Plan describes the approach that Lake County Public Works will take to implement the CMOM Plan. The Management Plan consists of the following components:

a. Organization
b. Legal Authority
c. Customer Service
d. Fiscal Responsibility
e. Data Management
f. Standard Design, Construction, and Inspection
g. Employee Training
h. Performance Measures

Sec. 2.2 Organization

Lake County Public Works is a department of Lake County Government. Lake County Public Works owns and operates three wastewater treatment plants in the North, Central, and Southern section of the County.

There are key divisions within this organization that provide support and assistance to the treatment facilities: Engineering, Budget & Finance, Maintenance, Meters, Billing, and Laboratory.

There is a staff of approximately 90 full time employees that are led by a director.

Sec. 2.3 Legal Authority

This CMOM Plan is incorporated into the LCPW Sewer Use Ordinance. The Sewer Use Ordinance was adopted pursuant to the statutory authority conferred by 55 ILCS 5/5-15021. The Sewer Use Ordinance includes the following:

1. Regulations regarding the use of public and private sewers that discharges to the public collection system.

2. Regulations that require individual property owners to maintain sewer laterals from the sewer main or property line to the building and to prevent unnecessary overburdening of the collection system.

3. Authority to control infiltration and connections from inflow sources.

4. Authority to prevent illegal connections and discharges into the collection system.

5. Fats Oil and Grease (FOG) elimination program.

6. Industrial Pretreatment Program

7. Standard specifications for the design and construction of sanitary sewers and lateral connections.

Each treatment facility has a National Pollution Discharge Elimination System permit. As a condition of that permit, they are required to have a CMOM Plan.

The Legislation listed below requires the monitoring, control, and elimination of SSOs:

a. Environmental Safety (415 ILCS 25/) Water Pollutant Discharge Act (Discharges of pollutants to waters used for public water supply, navigation or recreation).

b. Title 35: Environmental Protection Subtitle C: Water Pollution

c. Chapter I: Pollution Control Board
    1. Section 306:102 Systems Reliability
    2. Section 306.303 Excess Infiltration
    3. Section 306.304 Overflows
    4. Part 392 Guidelines for Notification of Restricted Status or Critical Review

d. Title 40 – Protection Of Environment (40cfr122.41) Chapter I

e. Environmental Protection Agency

f. Part 111 – EPA Administered Permit Programs: The National Pollutant Discharge Elimination System (Section 122.41 d) and e).

g. IEPA Compliance Assurance Section Contacts – (The Illinois EPA's Compliance Assurance section is the principle contact in matters concerning sanitary sewer overflows).

Sec. 2.4 Customer Service

Service delivery is key for a successful CMOM program. The customer service program is monitored, in part, based on the time necessary for response to and resolution of a problem. Documenting these issues provides valuable information related to system functionality, including identification of laterals versus mainline issues. A standard form is recommended to document customer calls and inquiries. Tracking and documenting customer calls and inquiries allows operators to identify and address problem areas and ensure that the work is completed. The billing software in place will be used for tracking customer calls and for providing service order request to the field staff.

Sec. 2.5 Fiscal Responsibility

LCPW has the authority to prepare a budget and secure revenues to finance the operation and maintenance of its collection systems. The Sewer Use & Rate Ordinances allow for the collection of revenues to fund the system operation and maintenance typically through a combination of system connection and permit fees, property taxes, and user charges which can either be a flat rate or a metered rated fee. The fee schedules are reviewed on a routine basis to ensure revenues track with system expenses.

The supervisor for each wastewater plant is also responsible for budgeting sufficiently to support the operation and maintenance of their plant and the collection system.

Sec. 2.6 Data Management

It is a goal of LCPW to have a geographic information system (GIS) in place to document and track system information. In addition to inventorying system information, the GIS database can also be utilized to document and track O&M activities including inspections, cleaning, rehabilitation and replacement work, flow data and system performance. If no GIS is available, an alternate method of documentation shall be utilized.

Table 2-1 Data Management

Item	Media Form	Where Kept	Responsible for Maintenance
Sewer System Map	Electronic	Network Server - GIS	Engineering
Sewer Lining Map	Electronic	Network Server - GIS	Engineering
As-Built Drawings of Sewers	Electronic and Paper	Engineering Division Files and Network Server	Engineering
Sewer Televising Data	Electronic and Paper	Engineering Division Files and Network Server	Engineering
Manhole Inspection Data	Electronic and Paper	Engineering Division Files and Network Server - GIS	Engineering/ Maintenance Division
Sewer Maintenance – Cleaning and Televising Work Orders	Electronic and Paper	Maintenance Division Files and Work Order System on Network	Engineering/ Maintenance Division
Complaint, Back-up, and Sanitary Sewer Overflow Data	Electronic and Paper	Operation Division Files and Work Order System on Network	Operation Division
Sanitary Sewer Construction Standards	Electronic and Paper	Engineering Division	Engineering
County Code	Electronic and Paper	Engineering Division	Engineering

Sec. 2.7 Standards for Design, Construction, and Inspection

At a minimum, LCPW will require all design and construction work to comply with the following standards.

i. Sewer Use Ordinance

ii. Illinois Recommended Standards for Sewage Works.

iii. Standard Specifications for Water and Sewer Main Construction in Illinois

Sec. 2.8 Employee Training & Safety Program

Lake County Public Works has an effective training program that allows staff to remain updated on the following topics:

a. Regulatory issues
b. Current Management tools and practices
c. Maintenance and PM Programs
d. Operational procedures

In addition, we established a robust safety training program for the employees who work within the collection system. The safety training program for staff includes some of the following classes: confined space, hazard communication, excavation and trenching, electrical safety with lock out/tag out procedures, fall protection, and PPE. The safety training requirements are to be reviewed on an annual basis (See the LCPW Safety Policies for more details). Staff is encouraged to attend regular trainings, seminars, and conferences.

Sec. 2.9 Performance Measurements

An effective CMOM program monitors and evaluates the operation and maintenance activities and makes adjustments necessary to improve customer satisfaction, system performance and to achieve long-term goals. Performance measurements can be divided into two categories; effectiveness and efficiency.

Effectiveness performance measures are indicative of the value or success of the operation and maintenance activities compared against a standard over time. An example of improved effectiveness would be reduction of sewer backups per mile of sewer main per year. A decreasing trend over time indicates improved O&M effectiveness/performance.

Efficiency performance measures reflect the frequency at which the measure is performed in the context of time or cost. Efficiency reflects quantity or value but not necessarily quality. An example of improved efficiency would be the reduction of costs for sewer cleaning per mile of sewer main. A decreasing trend of unit costs would indicate improved efficiency performance.

Table 2-1 illustrates the relationship between the program goals, objectives, and O&M activities.

Table 2-1 Program Goals, Objectives, and O&M Activities

Program Goal	Objective	O&M Activities
1. Comply with NPDES Permit requirements.	Ensure procedures are in place to identify, report, and mitigate SSOs	Monitor and report Sanitary Sewer Overflows
2. Establish a standard of practice for the operation of the collection system	Establish procedures for performing O&M activities	Routinely review and update the O&M procedures
3. Provide adequate capacity to convey base and peak flows	Gain an understanding of the system's capacity and identify potential bottleneck areas	Perform flow monitoring as appropriate Rehabilitate or replace sewers and manholes
4. Minimize the occurrence of sanitary sewer overflows	Ensure procedures are in place including O&M activities to minimize overflows	Inspect manholes, sewers, and pumping stations Rehabilitate or replace sewers and manholes Perform flow monitoring as appropriate Perform O&M activities
5. Improve system reliability using approved Maintenance Standards	Confirm the existence of any system components that do not function according to the National Association of Sewer Service Companies (NASSCO) standards	Inspect manholes, sewers, and pumping stations Rehabilitate or replace sewers and manholes Identify critical system components Document Emergency Response Plan Perform O&M activities
6. Improve customer service	Ensure customer service meets utility's needs	Monitor and record customer complaints and resolutions

Program Goal	Objective	O&M Activities
7. Identify and manage sources inflow & infiltration	Establish a program to reduce I&I	Inspect manholes, sewers, and pumping stations Rehabilitate or replace sewers and manholes Perform O&M activities
8. Maintain annual cleaning and inspection programs	Establish a program to maintain system assets	Perform cleaning and inspection per schedule
9. Maintain system assets through cost-effective preventative maintenance and rehabilitation programs	Ensure preventative maintenance is performed Conduct condition assessments	Inspect manholes, sewers, and pumping stations Rehabilitate or replace sewers and manholes Perform O&M activities
10. Operate a continuous CMOM program	Establish a program for monitoring the CMOM Program	Complete annual report Review annual reports Review and update the CMOM plan every three years

Section 3. – Operation and Maintenance Plan

Sec. 3.1 Background and Information

Operation and Maintenance Programs for a collection system are critical to properly operate and maintain the system and to provide for future service and expansion. O&M programs can often identify system problems before they become failures which can disrupt service. Collection system inspections are a key component of the O&M program to determine structural integrity, system performance, sources of inflow and infiltration, and illegal connections. The critical inspection programs in a successful O&M plan includes some of the following components:

a. Inspection of sewers
b. Inspection of manholes
c. Inspection of pumping facilities
d. Inspection of critical structures
e. Inspection of air relief valves
f. Sewer cleaning
g. Inspection of grease traps
h. Root control/removal
i. System rehabilitation
j. Code compliance – construction, connections, discharges

Sec. 3.2 Inspection of Sewers

1. One hundred percent of the sewers are to be inspected with a ten (10) year period with a minimum of ten percent (10%) of the sewers inspected per year on a cumulative basis. (For example, if 40% of an entity's sewers are inspected the first year, additional inspection is not required until the 5th year.)

2. Known problem areas of the collection system are to be inspected on a more frequent basis. Areas of known debris accumulation, FOG problems, root intrusion, SSO events, siphon sewers, flat/back pitched sewers, and defective areas previously identified but not repaired, etc. are to be inspected up to annually as necessary.

3. Sewer inspections are performed by using closed circuit television camera (CCTV).

4. The standardized sanitary sewer report documents the assessment of the sewer system. The sanitary sewer report should include a recommended repair or replace program for the problem areas identified during the inspection work.

Sec. 3.3 Inspection of Manholes

1. One hundred percent of the system manholes are to be inspected within a ten (10) year period with a minimum of ten percent (10%) of manholes inspected per year on a cumulative basis.

2. Problem manholes are to be inspected on a more frequent basis. Areas of know debris accumulation, FOG problems, force main discharge manholes, SSO events, high groundwater, and snow plowing areas, and rims below floodplain elevations, etc. are to be inspected up to annually as necessary.
3. Manhole inspections shall consider the structural integrity, condition of joints, chimney seals, frame and cover, ladder rungs, root intrusion, and debris accumulation.

4. Based on the condition assessment report (based on the NASSCO MACP Reporting) a recommendation shall be made for future inspections, repair or replacement.

Sec. 3.4 Inspection of Pumping Facilities

1. All pumping facilities are to be inspected weekly (at a minimum).

2. All mechanical, electrical, and instrumentation equipment are to be inspected and tested to verify their operation.

3. Piping systems and equipment shall be inspected for leaks.

4. Equipment run times and/or flows (as applicable) are to be documented and compared to historical data.

5. The wet well is to be inspected for the accumulation of debris and FOG. All wet wells are to be cleaned annually (at a minimum).

6. An in-depth annual inspection shall be performed to evaluate the condition of mechanical, electrical and instrumentation equipment including equipment wear, lubrication, vibration, and performance. The results of these in-depth inspections shall be compared against the manufacturer's specifications and historical results.

7. A general condition assessment report of the facility should be performed and required maintenance items are to be noted and scheduled for service, repair or replacement.

Sec. 3.5. Inspection of Critical Structures

1. All critical structures are to be inspected monthly.

2. All critical structures are to be inspected during significant wet weather events.

3. Critical structures are to be cleaned/repaired on an as needed basis based on the inspection of the structures.

Sec. 3.6 Inspection of Air Relief Valves

1. All air relief valves are to be inspected monthly.

2. Air valves shall be tested to ensure proper operation.

3. Air valves shall be cleaned and repaired as necessary based on inspections. A complete backwash, inspection, and testing of the air relief and piping will be done annually.

Sec. 3. 7 Sewer Cleaning

1. One hundred percent of the sewers are to be cleaned within a ten (10) year period with a minimum of ten percent (10%) of the sewers cleaned per year on a cumulative basis. The sewer cleaning work is typically performed in conjunction with the sewer inspection and CCTV work.

2. Sewer cleaning is performed to remove debris and sediment in the sewers to prevent blockages and potential overflows.

3. Areas of critical service and/or known problem areas are to be cleaned on a more frequent basis. Areas of known debris accumulation, FOG problems, root intrusion, SSO events, siphon sewers, flat/back pitched sewers, and defective areas previously identified but not repaired, etc. are to be cleaned at least twice per year.

4. Prohibitive discharge of the certain material to the sewer system (fire and explosive hazards, corrosive materials, obstructive materials, etc.,) and enforcement procedures are outlined in the Sewer Use and Pretreatment Ordinance.

Sec. 3.8 Inspection of Grease Traps

1. Grease from mostly Food Service Establishments is one of the major contributors to sanitary sewer overflow. In addition, a build-up of grease in the sanitary sewer can create mechanical problems at lift stations and interfere with the treatment process at the wastewater plant.

2. In order to properly address this issue, an effective Fats, Oils, and Grease Program must be in place.

3. The County has a FOG Program in place. Communities without a program are encouraged to work with LCPW staff to address FOG issues in their service area until their program is established.

4. All grease traps are to be inspected quarterly

5. Inspections of grease traps shall document that the grease traps are being cleaned on a routine basis (review pumping tickets), plumbing connections are maintained, and required maintenance is being performed.

6. Suspect grease traps shall be inspected on a more frequent basis.

7. Periodic witnessing of grease trap cleaning operations should be conducted to ensure proper cleaning and maintenance procedures are being performed.

Sec. 3.9 Root Control

1. Root intrusion in collection systems can result in blockages and overflows. Control of roots is to be done in combination with routine inspections, root treatment and cleaning to reduce potential blockages and overflows.

2. Root removal/control will be done on an as needed basis.

Sec. 3.10 System Rehabilitation

1. Each inspection report shall include a prioritized listing for repairs and/or replacement. The system repairs shall be prioritized based on their severity with priority placed on structural deficiencies and I&I activity.

2. Sewer repair or replacement to address structural deficiencies, major root intrusion and I&I shall be performed at the earliest opportunity. Such repair or replacement work should, when possible, be coordinated with other scheduled or anticipated work. The goal is to repair or replace within two (2) years all sewers identified as requiring repair or replacement. Replace pipes if their annualized cost of repair and maintenance significantly exceeds the cost of replacement.

3. Manhole repair or replacement to address structural deficiencies and I&I shall be performed at the earliest opportunity. Such repair or replacement work should, when possible, be coordinated with other scheduled or anticipated work. The goal is to repair or replace within two (2) years all manholes identified as requiring repair or replacement.

4. Pumping facility repairs to address structural deficiencies, mechanical piping leaks, reduced pumping capacities, and I&I shall be performed at the earliest opportunity. Such repair work should, when possible, be coordinated with other scheduled or anticipated work. The goal is to repair deficiencies within two (2) years following their discovery.

5. All critical structure defects shall be repaired as soon as possible.

6. All grease trap defects shall be repaired as soon as possible.

7. All air relief valve defects shall be repaired as soon as possible.

8. The prioritization report and all repair activities including annual report Code Compliance shall be included in the CMOM Report.

9, Businesses are to be inspected for compliance with the ordinances and codes. An important part of the code compliance inspections is to ensure industrial pretreatment standards are being met, grease traps are in service and being maintained, inspection manholes are installed and maintained, and service connections are not being made without permits.

10. New developments are to be inspected for compliance with the ordinances and codes. An important part of the code compliance inspections for new developments are to ensure that design and construction standards are being met and that service connections are not being made without permits.

Section 4. – Asset Management

Sec. 4.1 Background and Information

Asset management is a process of documentation wherein all assets, their life expectancy, condition assessment and operating information are brought together so that efficient and informed decisions regarding asset replacement may be made. The asset management process is used in conjunction with budgeting and financial reporting so that budgets can be developed with asset replacement needs in mind and so that a utilities financial stability will reflect a complete accounting of the utility's assets and their condition.

In June 1999, the Governmental Accounting Standards Board (GASB) released completely revised guidelines for how state and local governments report their finances to the public. Known as Statement 34, the revised guidelines indicate that financial records should show depreciation for infrastructure costs for the entire depreciation life and not as one-time entries for the year in which the asset was acquired or put into service. For example, a $1 million asset with a 10-year life would be shown not once as a $1 million charge but as $100,000 each year for 10 years. An asset management program provides the information needed to accurately account for all depreciable items.

Sec. 4.2 Information Management

To manage our maintenance program, the department will utilize a proprietary software utility management program or Enterprise Asset Management (EAM). This information management program is used for asset management, work order management, scheduled/preventive maintenance system, customer service, and parts inventory warehousing control.

The assets will primarily include equipment from the wastewater and water infrastructure. The program uses Oracle relational multiple databases to number and track all assets. It also can report on various queries (lookups) and perform costing reports. With other report engines, such as Crystal Reports, MS Access, etc., custom reports can be developed. The EAM program also interfaces with GIS mapping.

Sec. 4.3 Management of Asset

An infrastructure asset is any long-lived capital asset that is operated as a system or network, such as a sewer collection system. The sewers, manholes, and pump stations are the primary asset components of the collection system. Buildings that are integral to the function of the network, such as pump station houses, are also considered part of the infrastructure asset.

The key elements of asset management are:

a. Level of service definition
b. Selection of performance goals
c. Information system
d. Asset identification and valuation
e. Failure impact evaluation and risk management
f. Condition assessment
g. Rehabilitation and replacement planning
h. Capacity assessment and assurance
i. Maintenance analysis and planning
j. Financial management
k. Continuous improvement

These elements should be continuously reviewed by everyone in the organization. This should involve management, finance, engineering, administrative, and field staff.

Sec. 4.4 Asset Management Plan

The Asset Management Plan describes the objectives and strategies specifically related to asset management. These objectives are related to asset information, asset maintenance, asset rehabilitation and replacement, levels of service, and cost minimization.

One of the fundamental items of a good asset management plan is to know all of the assets owned by the organization and have a good system for naming and organizing the assets. The department maintains maps and information on the conveyance, storage, lift stations and water systems in its Geographical Information System (GIS) and a list of the conveyance, storage and treatment plant equipment on the EAM software.

An outline of some of the key elements for the management plan is noted below:

i. **All O&M activities** are tracked and documented. The forms used to record the O&M work are reviewed and updated on an annual basis.

ii. Collection system:

a. Maps are completed and kept up to date.
b. The overall system map will, at a minimum, identify manholes, water and sewer, lift and pumping stations
c. Sewer and water pipes will show diameters, age, and material of construction
d. The overall system map shall clearly illustrate the piping network of the collection system. The individual sewer atlas maps or GIS system will provide additional system information such as elevations for manholes and sewers, force main diameters, pump station capacities. The ultimate goal is for LCPW to have a fully developed GIS system.

iii. **Service Area** – All service areas will be properly assessed to determine the number of commercial, industrial, and residential buildings. Properties will be inspected whenever there is a change in use or real estate transfer.

iv. **Condition Assessment Program** - LCPW shall establish and maintain a program to evaluate, on a routine basis, the condition of the collection system assets. The assessment program is used to plan and budget upcoming rehabilitation and replacement work. Flow monitoring

v. **Equipment and Spare Parts** - To perform routine operations and maintenance, respond to emergencies and prevent sanitary sewer overflows, it is critical to have adequate equipment and spare parts available. LCPW is responsible for maintaining the necessary equipment and spare parts unique to its collection system to address routine O&M operations and response to emergencies. This inventory shall be reviewed on an annual basis.

vi. **The Critical Structures/Components** of the collection
vii. system are to be identified and monitored on a route basis.

viii. **Repairs** - Routine maintenance will identify repair needs within system components. The appropriate repair for any given problem is dependent upon the nature of the problem. A priority hierarchy has been established to structure what and when repairs are to be accomplished. The hierarchy is based upon identifying and repairing critical components first. Critical components are parts of the collection system which if malfunction occurs will result in system failure and sewer overflow. Such items may include failure of a pump, failure of a backup generator to start, or obstruction in the sewer line.
Other problems identified by maintenance activities will be less acute and can be repaired on a lower priority basis.

When normal maintenance activities identify the need for component repairs or when problems are brought to the attention of the system by customers or others, the problem and corresponding repair will be assigned a priority ranking.

ix. **Design and Performance Provisions** - An effective program that ensures that new sewers (including building laterals/connections) are properly designed and installed can help avoid permanent system deficiencies that could create or contribute to future overflow events and/or operation and maintenance problems. Similarly, major rehabilitation and repair projects are opportunities to ensure that work is done correctly in a way that will minimize future problems.

The plan requires the department to develop and implement programs to ensure:

a. Requirements and standards are in place for the installation of new collection system components and for major rehabilitation projects.
b. Procedures and specifications exist for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects that are implemented.

x. **Emergency Response Procedures** - Effective emergency management planning requires considerable coordination and forethought. There are various types of emergencies and/or disasters that can have a very negative impact on the operation of the sanitary sewer system. When a dry weather sanitary sewer back-up occurs, the sewer cleaning equipment is used to clean the blocked sewer. If that effort is unsuccessful, the internal closed-circuit television equipment is used to inspect the line to determine the exact nature of the obstruction. If more aggressive cleaning or root removal won't solve the problem, emergency underground utility locates are requested and the area is excavated to make the necessary repair.

When wet weather sanitary sewer overflows or basement back-up occur, the Operations Staff check downstream collector and interceptor sewers to see if they are surcharged. If the downstream collector and interceptor sewers are surcharged, the line with the sanitary sewer overflow or basement back-up will be flagged for an internal televised pipe inspection to attempt to identify infiltration and inflow sources. The tributary area may also be targeted for smoke testing, sump pump inspections, and dye water flood testing to determine infiltration and inflow sources.

xi. **Customer Service** - The citizens in many communities often know very little about the wastewater treatment and collection services performed for them. Our customers may only become aware of the collection system and its owner or operator when the system fails to work as designed, an overflow occurs, or through articles in local newspapers, or public announcements on radio or television. We plan to create opportunities to build community support to help citizens understand the need to support the operation and maintenance of their system. Examples of public relations activities include:

a. Workshops, career fairs, and open house at schools and universities
b. presentations to local officials and businesses about the wastewater profession
c. presentations to citizens, building inspectors, public utility officials, and members of the media
d. working with small communities and homeowner's association group

An effective customer service and public relations program also requires that all inquiries, requests, and complaints are addressed in a timely fashion. Complaint information can help us further develop or revise our programs to better address areas of concern. Our personnel will be trained to receive complaints and maintain a data base with the following:

a. Date and nature of the complaint or request
b. Location of the problem
c. Name, address, and telephone number of the customer
d. Cause of the problem
e. To whom the follow-up action was assigned
f. The initial date of the follow-up action
g. Date the complaint or request was resolved
h. Total days to end the problem
i. Feedback to the customer as follow up

Part of customer service also means letting customers know if their service is going to be affected by our plans or programs. For example, affected customers will be notified before work begins on major construction or maintenance. Notification methods may include door hangers, newspaper notices, fliers, signs, and announcements on radio or television. Information will also be provided to residents on cleanup and safety procedures following basement backups and other overflows.

xii. **Asset Hierarchy** - The department has organized its assets by location and class (type). The location hierarchy includes buildings, treatment plants, and subsystems in the conveyance system. The class hierarchy also includes equipment types (i.e. pumps, conveyors, valves), sewer types (i.e. interceptor sewers, collector sewers, force mains).

xiii. **Asset Inventory** - A physical inventory of the treatment plant and maintenance equipment must be conducted on an annual basis. The assets should be clearly identified and documented.

xiv. **Preventative Maintenance** - A good preventive maintenance program is one of the best ways to keep a system in good working order and prevent service interruptions and system failures which can result in overflows and/or backups. In addition to preventing service interruptions and system failures, a preventive maintenance program can protect the capital investment in the collection system. Preventive maintenance activities should ensure that the following occurs:

a. Routinely inspects the collection systems and addresses defects or other problems.
b. Investigates complaints and promptly corrects faulty conditions.
c. Provides maintenance records, an adequate workforce and appropriate equipment in working order.
d. Maintains and updates a schedule of planned activities.
e. Preventive maintenance activities typically address:
    1. Planned, systematic, and scheduled inspections to determine current conditions and plan for maintenance and repairs.
    2. Planned, systematic, and scheduled cleaning and repairs of the system based on past history.
    3. Proper sealing and/or maintenance of manholes.
    4. Regular repair of deteriorating sewer lines.
    5. Remediation of poor construction.

6. A program to ensure that new sewers and connections are properly designed, inspected and constructed and new connections of inflow sources are prohibited.
7. A program to oversee lateral and private collection system installations that tie into public wastewater collection systems.
8. A program to eliminate existing illegal inflow sources and a strategy for informing and educating the public about such sources.

Section 5. – Capacity Plan

Sec. 5.1 Background and Information

The goal of LCPW is to do its part to maintain sufficient capacity for dry weather flows, ability to convey peak wet weather flows, and capacity for future connections within the regional system as a whole. The capacity plan shall also provide a review of the collection system to identify trouble spots within the collection system. Identifying the problem areas will allow LCPW to make the necessary repairs and improvements to the system to improve service, reduce overflows and backups, and reduce sources of inflow and infiltration.

Sec. 5.2. Capacity

1. Collection system shall have no dry weather capacity restrictions.

2. LCPW shall continue to review flows during wet weather events to identify and reduce inflow and infiltration.

3. LCPW shall have an on-going inspection program to identify sources of inflow and infiltration.

4. LCPW shall enforce its ordinances on a continuous basis to ensure that inflow and infiltration is being reduced to the extent practical.

Sec. 5.3 Sewer & Water Assessment

The County will periodically solicit the services of professional consultants to assist with the determination of the status and quality of our infrastructures. The reports from these investigations will be used for future recapitalization and CIP planning. These assessments will examine:

a. Probability of Failure
b. Consequence of Failure
c. Best Practices
d. Program development and efficiency
e. Cost Estimates

Sec. 5. 4. Field Investigations

1. Flow monitoring should be performed to evaluate system flows and to evaluate system capacity constraints.

2. Visual monitoring of system flows shall be performed to evaluate system flows. The visual monitoring shall be performed during dry weather and wet conditions to establish baseline dry weather flows and to track wet weather flows. The results of the visual monitoring shall be reviewed against prior observations to gauge any changes in flow. Weather conditions should also be considered during the wet weather flow observations.

3. If visual flow monitoring indicates a significant increase of dry weather flows without an expansion of the service area and/or a significant increase of wet weather flows, an investigation of the service area shall be performed. Field investigations may include sewer televising, dye testing, smoke testing, and/or flow monitoring with flow metering equipment.

4. Flow meter readings for pumping stations equipped with flow meters shall be documented during both dry weather and wet weather conditions and compared against historical data to evaluate system flows and capacity. New pumping stations with a design capacity of 1,200 gpm or more shall be equipped with flow meters.

5. For pumping stations equipped with hour meters, the pump run times shall be documented during both dry weather and wet weather conditions and compared against historical data to evaluate system flows and capacity.

6. Dry and wet weather flow monitoring in areas of high I&I should be performed to quantity and confirm I&I flow.

Sec. 5.5 I&I Reduction

1. LCPW shall have an ordinance for property owners to maintain their service connection and prohibit connection of clean water sources to the sanitary sewer.

2. LCPW shall make system repairs to reduce public system sources of inflow and infiltration.

3. LCPW should continue to review alternative programs to eliminate clear water inflow and infiltration into the sanitary sewer system.

4. LCPW should encourage homeowners and businesses to disconnect downspouts, sump pumps, footing drains, area drains that are connected to the sanitary sewer system.

Sec. 5.6 Facility Planning

i. Lake County Public Works Facility Plans shall be reviewed and updated periodically to ensure that sufficient system capacity will be in place for the planned future growth.

ii. Number of current service connections, number of committed service connections, and available system capacities shall be documented, reviewed, and updated annually.

iii. Record and review number of new services being made per year.

Sec. 5.7 Capacity Assurance Check List

a. Current and up-to-date sewer system map
b. Current Facility Plan
c. Current and up-to-date number of service connections
d. Current and up-to-date system flow rates (dry and wet weather) – pump station records
e. Pump station capacities
f. Program to monitor bottleneck/capacity constriction areas/problem areas
g. Infiltration/Inflow Analysis
h. Sewer system evaluation survey
i. Flow monitoring program

Section 6. – Response Plan: SSOs and Emergencies

Sec. 6.1. Background and Information

LCPW is committed to provide reliable sanitary sewer service to its customers and minimize the potential damage to waterways, infrastructure, homes, and businesses due to sanitary sewer overflows (SSO). The response plan shall outline the procedures to respond to overflows and emergencies, documents the work performed, and identifies the appropriate parties to receive notification.

Sec. 6.2 SSO Response Plan

LCPW shall develop a SSO Response Plan to be reviewed and updated as appropriate. The SSO Response Plan shall, at a minimum, include the following elements:

a. Identification of known or potential overflow sites

b. Procedure for receipt of notification of a SSO event
   1. Time and date call were received
   2. Caller's name and phone number
   3. Location of problem
   4. Description of problem and observation
   5. Any other information that may assist responders

c. Procedure for notification/communication of SSO events
   1. Responders
   2. Emergency management officials
   3. County officials
   4. Regulatory agencies
   5. Affected customers/public
   6. Lake County Health Department

d. Third party notice plan
   1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows that may endanger health
   2. Identifies overflows that would be reported
   3. Identifies who shall receive notification
   4. Identifies the specific information that would be reported
   5. Includes a description of the lines of communication
   6. Includes the identities of responsible officials

e. Procedure for responders
   1. Required personnel (in-house staff and contract services)
   2. Required equipment
   3. Probable response activities and methods
   4. Response time standards
   5. Information to be communicated to affected property owners and others:
      i. Nature of expected response
      ii. Anticipated timeframe of response activities
      iii. Contact information
   6. Persons/agencies to be notified of the SSO event
   7. Post response reporting standards including reasons for the SSO and the necessary actions to prevent the same or similar SSO occurrence in the future

f. Investigation procedures for determining the cause of the SSO event

g. Documentation of maintenance procedures for individual incidents

h. Documented training for field personnel, including first responders, covering all procedures and methods used to respond to SSO events

i. IEPA Sanitary Sewer Overflow or Bypass Notification Summary Report, see Appendix B.

j. IEPA contact information:

IEPA Regional Office

Jay Patel, Manager
Illinois EPA – DWPC
9511 West Harrison
Des Plaines, IL 60016
Phone: (847) 294-4000
Fax: (847) 294-4115

IEPA Springfield State Office

Manager – Mike Garretson
Wastewater Compliance Unit Manager – Roger Callaway
Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section #19
1021 North Grand Avenue East
PO Box 19276
Springfield, IL 62794-9274

Sec. 6.3 Major Emergencies Response Plan

Lake County Public Works shall develop a Major Emergency Response Plan to be reviewed and updated as appropriate. The Major Emergency Response Plan shall, at a minimum, include the following elements:

a. Introduction and Background

b. Description of System (including system map(s))
   1. System size
   2. System components
      i. Collection system
      ii. Pump stations and force mains

c. List of Critical Customers (hospitals, schools, municipal facilities, fire station, police station, nursing homes, etc.)

d. Procedure for Notification/Communication of Emergencies
   1. Responders
   2. Emergency management officials
   3. County officials
   4. Regulatory agencies
   5. Affected customers/public
   6. Contact information for managers

7. Contact information for field supervisors

e. List and Location of Critical System Components
   1. Pipe connections (ID interceptors)
   2. Pump stations (table with key information for each pump station)

f. Potential Threats and Response Procedures (for each, include step by step procedures including responder responsibilities, required equipment and anticipated timeline)
   1. Manmade
      i. Mechanical equipment disabled
      ii. Primary power source disrupted
      iii. Secondary/emergency power source disrupted
      iv. Alarm system failure
      v. Assault of field staff
      vi. Theft
      vii. Arson
      viii. Vandalism

   2. Accidental
      i. Illicit discharge
      ii. Sewer blockage
      iii. Sewer overflow
      iv. Force main breakage
      v. Mechanical equipment failure

   3. Natural threats
      i. Flooding
      ii. Tornadoes
      iii. Snow/ice storms
      iv. Other (sever wind, lightning, etc.)

g. Preventative Measures
   1. Access control
   2. Barriers (physical)
   3. Backflow preventers
   4. Testing and maintenance

h. Emergency Contact Information Directory

Section 7. – Condition Assessment

Sec. 7.1 Background and Information

The Condition Assessment involves documentation and inspection of the sanitary sewer collection system to assess the condition of LCPW sanitary sewer infrastructure. The information gathered during the assessment is used to plan and budget for repair, rehabilitation, and replacement of the system components. Recommendations for additional inspections and cleaning are made from these assessments. Listed below are several key elements that are part of the Condition Assessment process.

Sec. 7.2 Condition Assessment Purpose

1. The purpose of the condition assessment is to utilize a proactive and coordinated asset management-based approach to assessing the sanitary sewer system condition and remaining useful life and managing rehabilitation and replacement of the system components.

2. The condition assessment program will guide LCPW to be able to more effectively and proactively prioritize and implement system inspections, cleaning, repairs, rehabilitation, and replacement of the system components needed in order to identify and address sources of inflow and infiltration, assure sufficient capacity in both dry and wet weather, and to reduce SSOs and backups.

Sec. 7.3 Condition Assessment Key Elements

1. The tools listed in Section 3 – Operation and Maintenance Plan, and Section 5 – Capacity Plan will be used for the condition assessment. These tools include but are not limited to inspection, cleaning, smoke testing, dye testing, root control, and flow monitoring.

2. System inspections and O&M activities are recorded and documented utilizing LCPW standard forms.

3. The data from the inspections is reviewed and evaluated by LCPW staff. The condition of the system components is assessed and rated. Current assessments are compared against the previous assessments.

4. Based on the condition assessment rating, recommendations are made on a continuing basis to repair, rehabilitate, and replace system components to maintain LCPW assets.

5. Analysis of system performance, maintenance history, age of materials, and structural condition is also used to prioritize system recommendations.

Sec. 7.4 Condition Assessment Recommendations

1. Recommendations to repair, replace, and rehabilitate the components of the sanitary sewer system are to be based on the condition assessment.

2. Depending upon the severity of the condition, the recommended system improvements may be performed by operations staff or by contract services.

6. Solutions for repair and rehabilitation will depend upon the condition of the system components, effectiveness of reducing I&I, and use of the appropriate technology for correcting the deficiency.

7. The condition assessment recommendations are to be utilized by LCPW to plan and budget for the system O&M and capital improvements.

Section 8. – Communication Plan

Sec. 8.1 Background and Information

LCPW will communicates with system customers, government/local officials, regulatory agencies, and the IEPA depending on the situation. The objective of the communication plan is to keep officials and the public informed of operation and maintenance activities in the event of an emergency.

Sec. 8.2 CMOM Communication

CMOM related topics identified for future and continued discussion may include:

a. Financial impact to O&M operations
b. Sanitary sewer collection system O&M activities
c. Problem areas in the system
d. Sanitary Sewer Overflows
e. Sanitary sewer system backups
f. Meeting the CMOM goals
g. Cost effective reduction of inflow and infiltration
h. Other topics of interest and concern
i. Corrective actions and length of time for repair

Sec. 8.3 Methods of Communication to Customers and the Public

LCPW will utilizes different methods of communicating information to system customers and officials. In general, the common methods of communications may include the following:

a. Board meetings, open to the public, in which the purpose of the meetings is to discuss and determine policy related to finance, department reports, personnel, operations, communications, and other utility business

b. Websites to post utility news, emergency notifications, meeting minutes, and other events as appropriate

c. Periodic newsletters that are distributed to system customers

d. Periodic mailings included in utility bills

e. Newspaper and TV

f. Reverse 911 or similar call system

Sec. 8.4 Reporting Methods for Internal Operations and to Lake County Public Works

LCPW utilizes a number of reporting methods to communicate the activities of the O&M operations staff. These methods may include:

a. Monthly Board or Committee meetings

b. Periodic staff meetings

c. Monthly reports to the government boards and officials

d. Budget reports

e. Annual Report data (calendar year: January through December)

f. CMOM Report

Section 9. – Pretreatment Program

See the County's Pretreatment Ordinance.

Sec. 9.1 Background and Information

The purposes of the Pretreatment Ordinance are:

a. To prevent the introduction of pollutants into the Lake County Public Works Water Reclamation Facilities that will or could interfere with the operation of the system or contaminate the resulting sludges and biosolids;

b. To prevent the introduction of pollutants into the Lake County Public Works Water Reclamation Facilities that will pass through the treatment process and be discharged into receiving waters, or otherwise be incompatible with the system;

c. To prevent the introduction of pollutants into the Lake County Public Works Water Reclamation Facilities that will pose a health or safety threat to the general public or to the Lake County industrial pretreatment program, collection system field crew or Water Reclamation Facilities personnel;

d. To promote reuse and recycling of industrial wastewater and biosolids from the Lake County Public Works Water Reclamation Facilities;

e. To establish how surcharges for excessive strength wastewater discharged into the Lake County Public Works Water Reclamation Facilities are calculated and evaluated;

f. To enable the Lake County Public Works Water Reclamation Facilities to comply with its National Pollutant Discharge Elimination System permit conditions, biosolids use and disposal requirements, and any other Federal or State laws to which the Water Reclamation Facilities is subject.

Section 10. – Fats, Oils, and Greases (FOG)

See the County's Sewer Use Ordinance

Sec. 10.1 Background and Information

This Program sets forth uniform requirements for Food Service Establishments (FSEs) and Non-Food Service Establishment FOG Dischargers (NFDs) (collectively FOG producing facilities) that discharge wastewater into the County Sanitary Sewer. The objectives of this section are:

a. To prevent the introduction of pollutants into the County's sewerage system by FOG producing facilities that will interfere with the operation of the Water Reclamation Facilities;

b. To prevent the introduction of pollutants into the County's sewerage system by FOG producing facilities that could cause Sanitary Sewer Overflows (SSOs); and,

c. To protect the environment from pollution resulting from SSOs.

Section 11. – Annual CMOM Review

Sec. 11. 1. Background and Information

The CMOM Review is necessary to ensure that the Plan is properly implemented, goals and objectives are met, and performance measures are reviewed, evaluated, and updated on a regular basis.

The CMOM Plan provides the framework and documentation to implement the programs that LCPW is currently performing. The CMOM Plan is meant to be a working document and will be updated as needed.

As part of the Review, the following will be done:

a. Review the CMOM Plan
b. Monitor the Plan
c. Provide recommendations
d. Update the CMOM Plan

Sec. 11. 2 Review the CMOM Plan

1. Reviews are to be performed by Lake County Public Works Management team at minimum every three (3) years.

2. Review the Plan for the following:

3. Goals that are applicable to LCPW

4. Goals and strategies that are applicable to and meet the requirements of the Lake County Public Works' NPDES permit.

5. Performance measures are being met.

6. Budget is adequate to meet the needs of the CMOM Plan.

Sec. 11.3 Annual CMOM Plan Performance Evaluation and Monitoring

1. Lake County Public Works will monitor the implementation and measure the effectiveness of the program through performance measures.

2. Lake County Public Works will perform an annual review of goals and performance measures to evaluate the program effectiveness.

3. LCPW will update and complete the Annual CMOM Summary Report. See Appendix C and D for an example copy of the annual summary reports.

Lake County Public Works will work collectively with other municipalities to review each other's CMOM Report, look for areas of support, and establish reasonable goals,

Sec. 11.4. Provide Recommendations

1. LCPW will obtain recommended plan revisions and/or updates from operations staff.

2. LCPW will provide recommendations to other Municipalities for updating their CMOM Plan.

Sec. 11. 5 Update the CMOM Plan

1, LCPW will update the CMOM Plan based on the review, feedback from operations staff, and review recommendations.

2. Provide updated copies of the CMOM Plan to Municipalities, IEPA, and other required agencies.

Appendix A – Legislation

ENVIRONMENTAL SAFETY
(415 ILCS 25/) Water Pollutant Discharge Act.
(415 ILCS 25/0.01) (From Ch. 85, par. 1700)

Sec. 0.01. Short title. This Act may be cited as the Water Pollutant Discharge Act. (Source: P.A. 86-1324)

(415 ILCS 25/1) (from Ch. 85, par. 1701)

Sec. 1. It is hereby declared that it is the public policy of the State of Illinois that there should be no discharges of oil or other pollutants into or upon any waters which are or may be used for the purposes of providing a water supply for any city, town or village, or for purposes of recreation or navigation and that those persons responsible for such discharges shall bear the costs of removal. (Source: P.A. 77-1605.)

(415 ILCS 25/2) (from Ch. 85, par. 1702)

Sec. 2. For purposes of this Section, unless the context otherwise requires, the term –

(a) "oil" means oil of any kind or in any form including, but not limited to, petroleum, fuel oil, sludge and oil refuse;

(b) "other pollutants" mean any floating materials which may cause unsightly appearance on the surface of such waters or are detrimental to aquatic life or the water quality of such waters;

(c) "discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping;

(d) "remove" or "removal" refers to removal of oil, or other pollutants, from the waters and taking such other action as may be necessary to minimize damage to the public health or welfare from discharges of oil or other pollutants;

(e) "facility" means any facility of any kind located in, on, or under land or waters and watercraft of every description;

(f) "waters" mean all waters of any river, stream, watercourse, pond or lake, wholly or partly within the territorial boundaries of the State of Illinois;

(g) "governmental body" means cities, villages, incorporated towns or any units of local government;

(h) "owner or operator" means any person owning or operating any facility;

(i) "person" includes an individual, firm, corporation, association or partnership. (Source: P.A. 77-1605.)

(415 ILCS 25/3) (from Ch. 85, par. 1703)

Sec. 3. The discharge of oil in quantities which exceed the standards adopted by the Pollution Control Board, or the discharge of other pollutants directly or indirectly into the waters is prohibited. (Source: P.A. 77-1605.)

(415 ILCS 25/4) (from Ch. 85, par. 1704)

Sec. 4. Whenever any oil or other pollutant is discharged in violation of Section 3 of this act, any governmental body having such waters within its territorial limits is authorized to act to remove or arrange for the removal of such oil or other pollutants. (Source: P.A. 77-1605.)

(415 ILCS 25/5) (from Ch. 85, par. 1705)

Sec. 5. The owner or operator of such facility from which oil or other pollutants are discharged in violation of Section 3 of this Act, shall be liable to such governmental body for the actual costs incurred for the removal of such oil or other pollutants. Such governmental body may, if necessary, bring an action in the circuit court for the recovery of the actual costs of removal, plus reasonable attorney's fee, court costs, and other expenses of litigation. (Source: P.A. 79-1358.)

(415 ILCS 25/6) (from Ch. 85, par. 1706)

Sec. 6. Nothing in this act shall affect or modify the liabilities of any owner or operator for damage to any publicly owned or privately-owned property resulting from a discharge or removal of oil or other pollutants; nor shall this act be considered as affecting or modifying any other existing authority or act. (Source: P.A. 77-1605.)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE C: WATER POLLUTION
CHAPTER II: ENVIRONMENTAL PROTECTION AGENCY
TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE C: WATER POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
PART 306
PERFORMANCE CRITERIA

SUBPART A: SYSTEMS RELIABILITY

Section 306.101 Preamble

This part contains specific requirements and prohibitions concerning existing and potential sources of water pollution. Unless the contrary is clearly indicated, all references to “Parts” or “Sections” are to Ill. Adm. Code, Title 35: Environmental Protection. For example, “Part 309” is 35 Ill. Adm. Code 309, and “Section 309.101” is 35 Ill. Adm. Code 309.101.

Section 306.102 Systems Reliability

a) Malfunctions: All treatment works and associated facilities shall be so constructed and operated as to minimize violations of applicable standards during such contingencies as flooding, adverse weather, power failure, equipment failure or maintenance, through such measures as multiple units, holding tanks, duplicate power sources or such other measures as may be appropriate.

Section 306.303 Excess Infiltration

Excess infiltration into sewers shall be eliminated and the maximum practicable flow shall be conveyed to treatment facilities.
(Source: Section 306.303 renumbered from Section 306.103(a) at 7 Ill. Reg. 5682, effective April 19, 1983)

Section 306.304 Overflows

Overflows from sanitary sewers are expressly prohibited.
(Source: Section 306.304 renumbered)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE C: WATER POLLUTION
CHAPTER II: ENVIRONMENTAL PROTECTION AGENCY
TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE C: WATER POLLUTION
CHAPTER 1: POLLUTION CONTROL BOARD

PART 392
GUIDELINES FOR NOTIFICATION OF RESTRICTED STATUS OR CRITICAL REVIEW PURSUANT TO 35 ILL. ADM. CODE 306.105

SUBPART 1: INTRODUCTION

Section 392.101 Purpose

This policy constitutes the guidelines governing notification by the Agency to sanitary districts and other wastewater treatment or transportation authorities of Restricted Status or Critical Review. Definitions of Restricted Status and Critical Review as well as the criteria utilized by the Agency for determination of Restricted Status and Critical Review are herein presented. The Agency shall notify sanitary districts, other wastewater treatment or transportation authorities, and the public of Restricted Status or Critical Review in accordance with the procedures established herein.

Section 392.102 Definitions

"Agency" means the Illinois Environmental Protection Agency.

"Critical Review" shall be defined as the Agency determination, pursuant to Section 39 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1039) and 35 Ill. Adm. Code 309.241, that a sewer is approaching hydraulic capacity or that a sewage treatment plan is approaching design capacity such that additional sewer connection permit applications will require close scrutiny to determine whether issuance would result in a violation of the Act or Regulations.

"Restricted Status" shall be defined as the Agency determination, pursuant to Section 39 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1039) and 35 Ill. Adm. Code 309.241, that a sewer has reached hydraulic capacity or that a sewage treatment plant has reached design capacity, such that additional sewer connection permits may no longer be issued without causing a violation of the Act or Regulations.

"Sewer Connection" means a sewer for which a construction permit is required under 35 Ill. Adm. Code 309.202.

Section 392.202 Criteria for Placing Sewage Treatment Plants on Restricted Status

The Agency may place a sewage treatment plan on Restricted Status when any of the following conditions exists, as shown by Agency field inspections, operational reports, records of permits issued or other information:

a) Hydraulic overloading of the treatment plant as determined by a comparison of the permitted design capacity of the plant with the actual average monthly flows measured at the plant during the three low-flow months in the preceding 12-month period, adjusted to include all outstanding (permitted but not connected) permits issued by the Agency, or other information on hydraulic loading of the plant available to the Agency (i.e., water pumpage, recent development, demographic and meteorological data, etc.);

Section 392.203 Criteria for Placing Sewers and Lift Stations on Restricted Status

a) The Agency may place sanitary sewers and lift stations on Restricted Status in order to prevent overflows as expressly prohibited 35 Ill. Adm. Code 306.103(b). Restricted Status may be imposed upon the confirmation of overflows in the form of basement backups, overflows of sanitary sewer manholes or sanitary sewer overflow devices.

TITLE 40 – PROTECTION OF ENVIRONMENT
40 CFR122.41
CHAPTER 1 – ENVIRONMENTAL PROTECTION AGENCY

PART 122 – EPA ADMINISTERED PERMIT PROGRAMS: THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Subpart C – Permit Conditions

Sec. 122.41 Conditions applicable to all permits (applicable to State programs, see Sec. 123.25).

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in Sec. 122.42. All conditions applicable to NPDES permits shall be incorporated into the permits have either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

(d) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
(e) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also include adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

Appendix B – IEPA Sanitary Sewer Overflow Report Form

Illinois Environmental Protection Agency

Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Sanitary Sewer Overflow or Bypass Notification Summary Report

Print Form

Reset Form

- Within 24 hours of the occurrence, notify the Illinois EPA regional wastewater staff by telephone, FAX, email or voice mail, if staff are unavailable.
- Within 5 days of the occurrence, provide a written report describing the overflow or bypass, including all information requested on this form. The permittee is required to submit this form or other equivalent written notification to the Illinois EPA at:

Bureau of Water/Compliance Assurance Section - MC #19
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

NOTE: You may complete this form online, save a copy locally, print, sign and submit it to the BOW/CAS MC #19, at the above address. You may also print the form before completing it by hand, signing and submitting it.

Failure to notify the Illinois EPA as specified may result in fines up to $10,000 for each day of violation.

Instructions: Use this form to report all unscheduled sanitary sewer overflow or bypass occurrences. Attach additional information as necessary to explain or document the overflow or bypass. For the purpose of this report, an overflow or bypass is defined as the discharge of untreated sewage from the sanitary sewer collection system to a surface water and/or ground due to circumstances such as those identified by the check boxes in the overflow or bypass details section of this form.

Use one form per occurrence. A single occurrence may be more than one day if the circumstances causing the overflow or bypass results in a discharge duration of more than 24 hours. If there is a stop and restart of the overflow or bypass within 24 hours, but it is caused by the same circumstances, report it as one occurrence. If the discharges are separated by more than 24 hours, they should be reported as separate occurrences.

24 Hour Notification Information

Permittee (Municipality or Facility Name): | Permit Number: | Person Representing Permittee Who Contacted IEPA:

Date: | Time: | AM ☐ | PM ☐ | IEPA Office Contacted: | Name of IEPA Employee Contacted:

Sanitary Sewer Overflow or Bypass Details

Date and Duration of Overflow or Bypass Occurrence (complete a separate form for each occurrence):

Start Date: | Time: | AM ☐ | PM ☐ | Duration of the overflow or bypass (hours and minutes):

Estimated Volume of Wastewater Discharged (gallons): | WWTP Flow During bypass (report in MGD): Not applicable for a collection system SSO. | Location of the Overflow or Bypass:

Circumstances Causing the Overflow or Bypass (check all that apply)

WPC 733
11/2011

☐ Rain ☐ Power Outage ☐ Equipment Failure ☐ Other (explain below)
☐ Snow Melt ☐ Broken Sewer ☐ Widespread Flooding

Provide a narrative description to further explain why the overflow or bypass occurred. For example, describe what equipment failed. What caused the power outage, or what plugged the sewer. Flooding should only be indicated, as a cause if there is significant flooding that is caused by high river, stream, or lake water levels, not just localized high water in the street.

Wet Weather (if applicable)

Date(s) and Duration of Rainfall:

Start Date: Time: AM PM End Date: Time: AM PM Amount of Rainfall (inches) Amount of Snow Melt (inches)

Contributing Soil Conditions (saturated, frozen, soil type)

Where Did the Discharge from the Overflow or Bypass Go? (check all that apply)

Provide the name of the local receiving water that the wastewater enters, which could be a nearby stream, river, lake, or wetland. If discharge does not enter directly into surface water, but indirectly by way of a ditch or storm sewer, trace the path of the ditch or storm sewer to find the receiving water.

- ☐ Runs on ground and absorbs into the soil
- ☐ Ditch: Name of surface water it drains to:
- ☐ Storm Sewer: Name of surface water it drains to:
- ☐ Surface water direct discharge:
- ☐ Basement Back-ups, (Number & use (i.e.residential, commercial) of buildings affected):
- ☐ Other, describe:

Actions to Correct This Occurrence and Prevent Future Owerflows or Bypasses

Describe what actions were taken to minimize the volume of wastewater discharged from the overflow or bypass reported on this form. Also describe what actions are planned to prevent or minimize future overflows or bypassess. Illinois law and NPDES permits prohibit overflows or bypasses, unless certain specified conditions are met. Sanitary sewer overflows and bypasses may be the subject of enforcement action.

Report Completed By

Contact Person:
Street Address:
PO Box:
City: State:
Zip Code: Phone:
County:

Authorized Representative Contact Information

Contact Person:
Title:
Street Address:
PO Box:
City: State:
Zip Code: Phone:
County:

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Authorized Representative Name (Print) Title

Authorized Representative Signature Date

Appendix C – Annual Flow Summary Report

ANNUAL FLOW SUMMARY

I. General Information

A. Agency Name_____

B. Agency Address

Street_____

City_____ State_____ Zip_____

C. Contact Person_____

D. Contact Information

Telephone_____ Fax_____

Email_____

E. Data Provided as of_____

II. Pumping Station Annual Flow Summary

	Pump Station No.	Station Hours	Flow Gallons	Notes
Previous Year				
Current Year				
Previous Year				
Current Year				
Previous Year				
Current Year				
Previous Year				
Current Year				
Previous Year				
Current Year				

III. Critical Structure Annual Flow Summary

	Structure Name	Visual Observations (flow depth)				Notes
		¼ Dia	½ Dia	¾ Dia	Surcharged	
Previous Year						
Current Year						
Previous Year						
Current Year						
Previous Year						
Current Year						
Previous Year						
Current Year						
Previous Year						
Current Year						

Appendix D – Annual Summary Report

SYSTEM INVENTORY SUMMARY

I. General Information

A. Agency Name_____

B. Agency Address

Street_____

City_____State_____Zip_____

C. Contact Person_____

D. Contact Information

Telephone_____Fax_____

Email_____

E. Data Provided as of_____

II. Collection System Description/Inventory

A. Number of Service Connections

Residential	Commercial	Industrial	Total

B. Gravity Sewer Inventory

Pipe Diameter (in)	Material	Length (ft)
	Total Length of Sewers (ft)	

C. Total Number of Manholes_____

D. Siphon Sewer Inventory

Pipe Diameter (in)	Material	Length (ft)
	Total Length of Siphon Sewers (ft)	

E. Force main Inventory

Pipe Diameter (in)	Material	Length (ft)
	Total Length of Force Main (ft)	

F. Air/Vacuum Release Valve Inventory

Pipe Diameter (in)	Material	Length (ft)
	Total Length of Sewers (ft)	

G. Pumping Station Summary

Station No.	Capacity (GPM)	No. of Pumps	Horsepower of Pumps	Discharge Manhole	Emergency Power

H. Other Critical Structure Summary

Name/Location	Description

CMOM ACTIVITY SUMMARY

for period_____

(Cumulative % tracked since_____)

I. Inspection Summary

Description	Quantity	%	Cumulative %
Gravity Sewer Cleaning (ft.)			
Force Main Cleaning (ft.)			
Root Control/Removal (ft.)			
Sewer Televising (ft.)			
Number of Defects Identified Current Year		(Details Attached)	
Manhole Inspections (no.)			
Number of Defects Identified Current Year		(Details Attached)	
Pumping Station Inspections (no.)			
Number of Defects Identified Current Year		(Details Attached)	
Critical Structure Inspections (no.)			
Number of Defects Identified Current Year		(Details Attached)	
Air Release Valve Inspections (no.)			
Number of Defects Identified Current Year		(Details Attached)	
Grease Trap Inspections (no.)			
Number of Defects Identified Current Year		(Details Attached)	
Other Inspections (Smoke Testing, Dye, etc.)			

II. Repair Summary

Description	Quantity	Notes	Cost
Manhole Repairs			
Manhole Replacements			
Sewer Spot Repairs			
Sewer Lining			
Sewer Replacement			
Pump Repairs (major items)			
Pump Replacement			
Generator Repairs (major items)			
Building Repairs (major items)			
Other Repairs:			

III. CMOM Activity Checklist

Confirm	CMOM Activity
	Review/Update System Inventory
	Sewer Atlas Up-to-Date
	Parts Inventory Reviewed
	Ordinances Reviewed
	Budget Review for CMOM Activities
	Fees/Rates Reviewed
	Safety Training Requirements Reviewed
	Safety Training Completed/Current
	Review Critical Structure List
	Review Major Emergency Response Plan
	Review SSO Response Plan
	Grease Trap Inspections Completed (See Details Attached)
	Code Compliance Inspections Completed (See Details Attached)
	Wet wells Cleaned
	Lift Station Flow Monitoring Records Reviewed (See Attached)
	Special Studies Completed_____

IV. Performance Indicators (#'s)

Quantity	CMOM Performance Indicator
	Pump Station Failure – mechanical
	Pump Station Failure – electrical
	Sanitary Sewer Overflows
	Basement Backups (not private service related)
	Complaints Received (not private service related)
	Complaints Resolved (not private service related)
	Other items:

V. Sanitary Sewer Overflows (SSO's) Reported

Date	Location	Cause[1]	Estimated Volume

[1]Attach SSO Report Form for each event

_____ None Reported

Were there any SSOs that occurred last year that are not listed above? If yes, list:

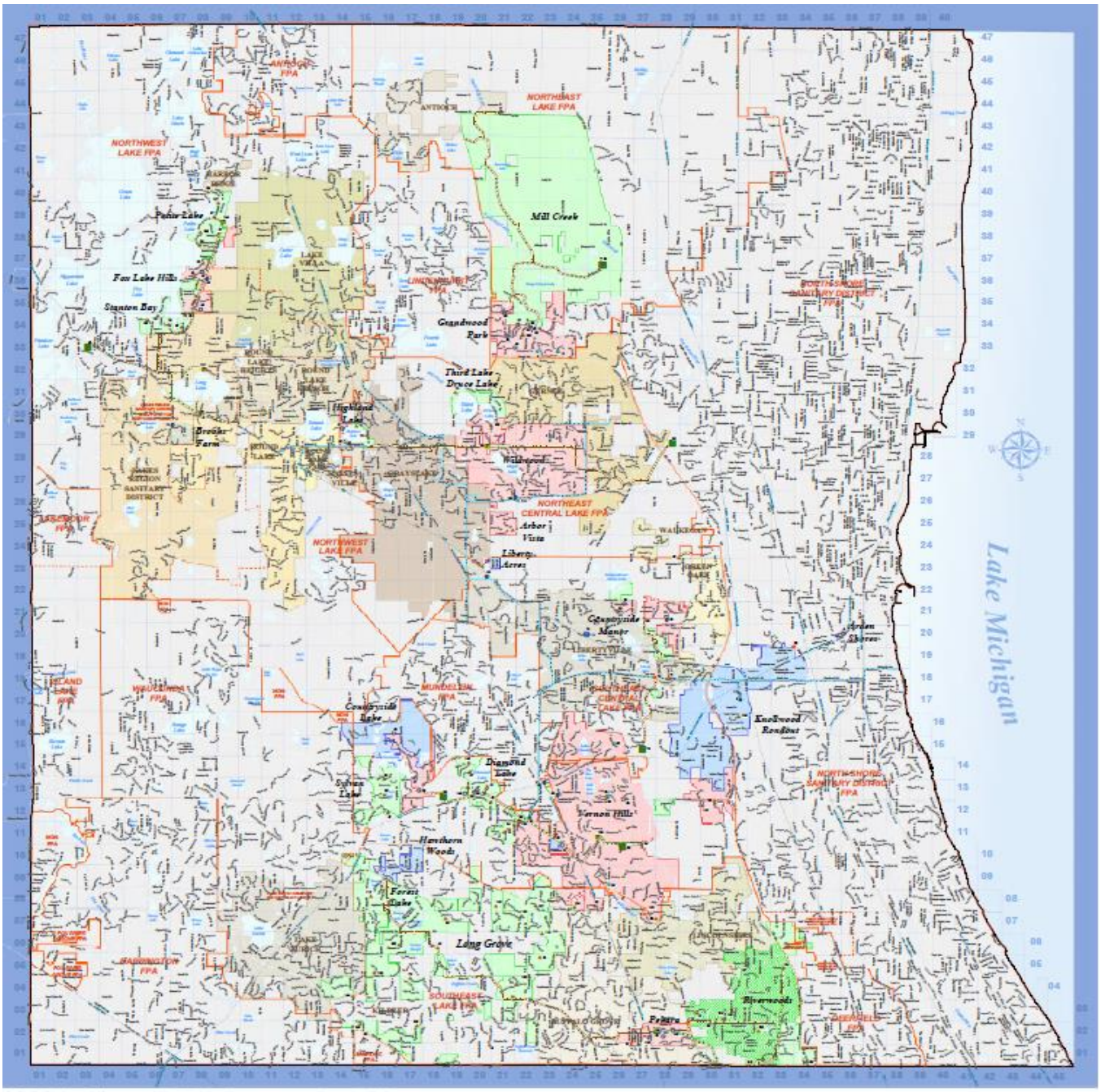
_____

_____

_____

_____

Appendix E – System Map


Lake Michigan
Fox Lake Hills
Stanton Bay
Grandwood Park
Third Lake
Dyce Lake
Highland Lake
Mill Creek
Wildwood
Arbor Vista
Liberty Acres
Countryside Manor
Arden Shores
Knollwood Rondout
Countryside Lake
Diamond Lake
Sylvan Lake
Vernon Hills
Hawthorn Woods
Forest Lake
Long Grove
Riverwoods
Prairie
NORTHWEST LAKE FPA
NORTHEAST LAKE FPA
NORTHEAST CENTRAL LAKE FPA
SOUTHEAST LAKE FPA
MUNDELEIN FPA
NORTHSHORE SANITARY DISTRICT FPA
Facility Planning Areas (FPAs)
FPA
SUB-FPA
Service Areas
Retail Water Only
Sewer Only (Operate and Maintain)
Retail Sewer Only
Retail Sewer, Operate and Maintain Water
Retail Sewer and Water
Wholesale Sewer, Retail Water
Wholesale Sewer Only
Antioch
Buffalo Grove
Grayslake
Green Oaks
Gurnee
Hainesville (Northeast Central)
Hainesville (Northwest)
Harbor Ridge
Lake Villa
Lake Zurich
Lake Region Sanitary District
Libertyville
Lincolnshire
Round Lake
Round Lake Beach
Round Lake Heights
Round Lake Park
Waukegan
Sewer and Water Facilities
Emergency Interconnection
Reservoir
Pump Station
Well
Laboratory
Lift Station
Administration
Flood Pump Station
Water Reclamation Facility
Water Tower
Delivery Structure
Regional Interceptor Sewer Force Main
Regional Interceptor Sewer Gravity Main
CLCJAWA Water Main
0 0.5 1 2 Miles
OCTOBER 2017
LakeCounty
Department of Public Works
650 West Winchester Road
Libertyville, Illinois 60048
Phone: (847) 377-7500
Fax: (847) 984-5865
publicworks@lakecountyil.gov

Appendix F – Staff / Division

Lake County Public Works Department
2019 Roster

ADMINISTRATION

Employee Name	Position Name	Phone	Cell
DALESSANDRO, KATHLEEN	Billing Supervisor	847.377.7126	
GARCIA, CRISTELA	Admin Asst II	847.377.7147	
GOMEZ MACHUCA, MARIA	Billing Tech	847.377.7153	
GRAY, JULIE ELLEN	Contract Manager	847.377.7160	
HEBERT, TATIANA	Accountant I	847.377.7122	
MCFARLANE, AUSTIN L	Operations Mgr	847.377.7134	847.309.0266
NORWOOD, ANDREA M	Finance Operations Mgr	847.377.7127	
OLSEN, SARA	Lead Billing Specialist	847.377.7138	
OSBORNE, KELLY	Life Cycle Manager	847.377.7146	224.545.4429
SEILER, LINDA	Executive Asst	847.377.7144	
SENSENIG, JOEL	Asst Supt of Pub Works	847.377.7124	847.309.2994
SEWELL, CINDY	Accounting Specialist	847.377.7159	
SPECK, PHILIP B	Operations Technician	847.377.7151	
TKACHUK, ROMAN	Acctng Specialist	847.377.7132	
VILLARREAL, MARIA	Billing Tech	847.377.7136	
WEICHMANN, JOAN M	Admin Clerk	847.377.7121	
WORDEN, RODNEY	Director of Public Works	847.377.7125	808.554.6214

ENGINEERING

Employee Name	Position Name	Phone	Cell
BAUM, SCOTT R	Prin GIS App Specialist	847.377.7135	
DEGRAVE, CHARLES J	Prin Engineer	847.377.7140	847.309.5405
DUPREE, WILFRED	Permit Tech	847.377.7148	
HUMBERT, DAVID A	Prin Engineer	847.377.7145	
MIAO, YING LIU	Prin Engineer	847.377.7149	224.406.4371
OTTERSEN, MARK W	Lead Engineering Tech		847.309.5498
POLI, PETER J	Lead Engineering Tech	847.309.5491	847.309.5491
SALAZAR, JAVIER J	Prin GIS App Specialist	847.377.7137	
SALGADO, DANIEL	Civil Engineer	847.377.7152	847.239.2808
SLOAN, BRITTANY ALBRECHT	Supervisor Engineer	847.377.7133	847.309.6479
WALSH, PATRICK J	Lead Engineering Tech	847.309.5495	847.309.5495

LAB

Employee Name	Position Name	Phone	Cell
DOLAN, MICHAEL	Lab Tech	847.377.7742	
HOOVER, SEIRRA	Lab Tech	847.377.7745	
JESSE, CHRISTINE	Sr Lab Tech	847.377.7736	224.688.9281
MULLETT, CASEY	Lab Tech	847.377.7743	
REIMER, WILLIAM J	Sr Lab Tech	847.377.7746	
ROSADO, KATIE A	Supervisor Lab Division	847.377.7741	224.688.5087
WHITE, EMILY	Sr Lab Tech	847.377.7747	

CENTRAL

Employee Name	Position Name	Phone	Cell
BRODNAN, DAVID	Water/Wastewater Plant Operator	847.377.4850	847.309.5417
CARLSON, ANTHONY	Water/Wastewater Plant Operator	847.377.4850	224.234.8124
CLARKE, BRENDAN	Lead Operator	847.377.4850	847.309.3223
GIBSON, MARVIN R	Sr Water/Wastewater Operator	847.377.4850	847.309.5512
GRINNELL, MICHAEL K	Water/Wastewater Plant Supervisor	847.377.4851	847.715.6484
HEYWOOD, VINCENT J	Sr Water/Wastewater Operator	847.377.4850	224.571.6522
PETERSON, DAVID A	Water/Wastewater Plant Operator	847.377.4850	847.309.3412
PIEPER, JASON H	Chief Water/Wastewater Plant Operator	847.377.4852	847.309.5424
TAYLOR, CHARLES	Maintenance Mech	847.377.4854	847.309.2159

NORTH

Employee Name	Position Name	Phone	Cell
BRODIN, TERRANCE	Water/Wastewater Plant Operator	847.377.4840	847.987.2771
BUEHRER, MICHAEL G	Water/Wastewater Plant Operator	847.377.4840	224.343.0547
DZIEKONSKI, KAMIL	Water/Wastewater Plant Operator	847.377.4840	847.309.5423
ELLISON, MATTHEW	Chief Water/Wastewater Plant Op	847.377.4844	224.277.5486
HAUSHERR, KEVIN	Public Works Supervisor	847.377.4840	847.565.9519
HEEREMA, CHRISTIAN	Water/Wastewater Plant Operator	847.377.4840	224.234.3339
HENLEY, BRIAN	Water/Wastewater Operator Trainee	847.377.4840	
RANGEL, JOHN W	Water/Wastewater Plant Supervisor	847.377.4842	847.309.5129
SULLIVAN, SCOTT P	Maintenance Mech	847.377.4840	224.306.4276
TINCHER, CHASE E	Lead Operator	847.377.4840	847.309.2671
WYDZIERZECKI, MAX	Water/Wastewater Plant Operator	847.377.4840	847.309.5430

SOUTH

Employee Name	Position Name	Phone	Cell
BEST, JAYCE	Water/Wastewater Plant Operator	847.377.4800	224.456.0155
BEYER, THOMAS M	Maintenance Mech	847.377.4806	847.309.5124
CHAPMAN, LAURA A	Water/Wastewater Plant Operator	847.377.4806	847.521.0220
COLWELL, DANIEL T	Sr Water/Wastewater Operator	847.377.4800	847.309.7016
DEBARTOLO, DEAN A	Sr Water/Wastewater Operator	847.377.4800	847.732.9897
EDWARDS, LAWRENCE L	Chief Water/Wastewater Plant Op	847.377.4802	847.651.2832
FREE, CRAIG	Sr Water/Wastewater Operator	847.377.4800	224.571.6520
HERR, STEVEN J	Chief Water/Wastewater Plant Op	847.377.4803	847.309.7015
LANDSHOF, DAVID H	Water/Wastewater Plant Supervisor	847.377.4801	847.309.6376
SMITH, PAUL E	Sr Water/Wastewater Operator	847.377.4800	847.651.5153
WILLIAMS, KEVIN	Water/Wastewater Plant Operator	847.377.4800	847.309.2854

Appendix G – Monitoring Assessments

Documents can be found here U:\Engr

Appendix H – Sewer Cleaning & Maintenance Schedule

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Appendix I – Root Control Program Schedule

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Appendix J – Force Main & Air Vac Schedule

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Appendix K – Pump & Lift Station List

CENTRAL - LIFT STATIONS

Site Information

4814542: Acorn Lane Lift Station, Diamond Lake

Acorn Lane Lift Station Lift Station

Address 26290 N Acorn Ln.

Dialer Heath House Sitter 847-566-7982

Electrical Account: COM ED 22936-84001

BOSS 4814542 - 48110

IEPA PERMIT

IEPA PERMIT 1971-IA-909-2: 1971-IA-909-2

IEPA PERMIT 1972-IA-1189-2: 2013-IB-0923

IEPA PERMIT 201 3-18-0923: 201 3-18-0923

Generator Yes

PUMP 1

PUMP 2

EDC.# 081510404011

ELECTRICAL ADDRESS: 26256 N ACORN LN, 4542, MUNDELEIN IL

4876945: Anderson Street Lift Station, Green Oaks

Anderson Street Lift Station Lift Station

Address: 1175 Anderson Dr., Green Oaks

Dialer None

Electrical Account: COM ED N /A

BOSS 4876945-48210

Generator No

4814550: Chevy Chase Lift Station, Countryside Lake

Chevy Chase Lift Station Lift Station

Address 26864 N. Chevy Chase Rd.

Dialer: Phonetics Sensaphone 847-970-9462

Electrical Account: COM ED N / A

BOSS 4814550 - 48110

PUMP 1

PUMP 2

Generator No

EDC.# 5904127050

ELECTRICAL ADDRESS: 26900 N CHEVY CHASE RD, 4550, MUNDELINE IL

4833149: Christine Court Lift Station, Vernon Hills

Christine Court Lift Station Lift Station

Address: 1211 Christine Ct. (Sarahs Glen)

Phone 847-793-0278

Dialer: Phonetics Sensaphone 847-793-0278

Electrical Account: COM ED 42271-40029

Gas Account: North Shore Gas 0 5000 2176 3533

BOSS 4833149 - 48110

PUMP 1

Serial # 1: S86606

Hydromatic Submersible Pumps: Model S4NX750JC

CAPACITY: 300 GPM @ 32.2' TDH

IMPELLER: 7.12"

MOTOR: 7.5 HP, 1750 RPM, 230 volts, 3 phase, 60 cycle

PUMP 2

Serial # 2: S86605

Hydromatic Submersible Pumps: Model S4NX750JC

CAPACITY: 300 GPM @ 32.2' TDH

IMPELLER: 7.12"

MOTOR: 7.5 HP, 1750 RPM, 230 volts, 3 phase, 60 cycle

Generator Yes

EDC.# 4227140029

ELECTRICAL ADDRESS: 1135A E ROUTE 45, VERON HILLS IL

4833151: Claridge Court Lift Station, Vernon Hills

Claridge Court Lift Station Lift Station

Address 7290 Claridge Ct

Dialer: Phonetics Sensaphone 847-566-6920

BOSS 4833151 - 48110

PUMP 1

PUMP 2

Generator No

EDC.# NOT TRACKING ATM

4833147: Creek View Drive Lift Station,Vernon Hills

Creek View Drive Lift Station Lift Station

Address 1101 Creekview Dr.

Dialer: Phonetics Sensaphone 847-634-8363

Electrical Account: COM ED 04341-54006 (All of 3121)

Gas Account: North Shore Gas 2 5000 2662 7695

BOSS 4833147 - 48110

IEPA PERMIT 1989-IA-2260

IEPA PERMIT 1989-IA-2260: 1989-IA-2260

IEPA PERMIT 1994-IB-5005: 1994-IB-5005

GENERATOR Yes

PUMP 1

PUMP 2

EDC.# NOT TRACKING ATM

4814541: Crescent Drive Lift Station, Sylvan-Diamond Lake

Crescent Drive Lift Station Lift Station

Address 21381 Crescent Dr

Crescent Drive Lift Station:

21383 CRESCENT DR:

MUNDELEIN IL 60060:

Dialer: Sensaphone 847-566-0441

Electrical Account: COM ED 15514-48019

BOSS 4814541 - 48110

IEPA PERMIT

IEPA PERMIT 1972-IA-1189-2: 1972-IA-1189-2

PUMP 1

PUMP 2

EDC.# 1551448019

ELECTRICAL ADDRESS: 0 S CRESCENT OTHR 4541, 1W BUENATER, FREMONT TWOP IL

4833150: Daybreak Lane Lift Station, Vernon Hills

Daybreak Lane Lift Station Lift Station

Address 7235 Daybreak Lane

Dialer: Phonetics Sensaphone 847-566-7020

BOSS 4833150-48110

Generator Yes

PUMP 1

PUMP 2

EDC.# NOT TRACKING ATM

4833142: Denny's Lift Station, Vernon Hills

Denny's Lift Station Lift Station

Address 690 E Townline Rd, (Hawthorn Center)

Electrical Account: COM ED 04341-54006

BOSS 4833142 - 48110

IEPA PERMIT 1977-HB-5585

IEPA PERMIT 1977-HB-5585: 1977-HB-5585

PUMP 1

PUMP 2

EDC.# NOT TRACKING ATM

4811340: Des Plaines Drive Lift Station, N. Libertyville Estates

Des Plaines Drive Lift Station Lift Station

Address 16287 W. Des Plaines Dr., Libertyille, IL 60048

Des Plaines Dr Lift Station:

16287 W. Des Plaines Dr., Libertyille, IL 60048:

Libertyille, IL 60048:

Dialer: Sensaphone 847-549-0527

Electrical Account: COM ED 18503-34012

Gas Account: North Shore Gas 9 5000 0919 2587

BOSS 4811340 - 48110

PUMP 1

PUMP 2

Generator - Gas YES

EDC.# 1850334012

ELECTRICAL ADDRESS: LIFT 134016275 W DES PLAINES DR, LIBERTYVILLE IL

General Information

Pumps: 2

GPM @ 56 TDH: 230

Impeller Size: 8.13"

4814548: Diamond Lake Road Lift Station, Diamond Lake

Diamond Lake Road Lift Station Lift Station

Address 25960 N. Diamond Lk. Rd.

Dialer: Sensaphone 847-949-7608

Electrical Account: COM ED 23776-10003

Gas Account: North Shore Gas 0 5000 2908 8544

BOSS 4814548 - 48110

Generator Yes

IEPA PERMIT

IEPA PERMIT 1971-IA-909: 1971-IA-909

IEPA PERMIT 1971-IA-909-2: 1971-IA-909-2

IEPA PERMIT 1972-IA-1189-1: 1972-IA-1189-1

IEPA PERMIT 1990-IA-0412: 1990-IA-0412

PUMP 1

IMPELLER DIAMETER: 7.88"

MANUFACTURE: HYDROMATIC SUBMERSIBLE

MODEL: S4M1000 M3-4

PHASE: 3

SERIAL NUMBER: S6889

VOLTAGE: 230

HORSE POWER: 10 HP

PUMP 2

IMPELLER DIAMETER: 7.88"

MANUFACTURE: HYDROMATIC SUBMERSIBLE

MODEL: S4M1000 M3-4

PHASE: 3

SERIAL NUMBER: S6890

VOLTAGE: 230

HORSE POWER: 10 HP

EDC.# 0731070054

ELECTRICAL ADDRESS: 25960 N DIAMOND LAKE RD, 4548, ELA TWP IL

4814547: Gilmer Road Lift Station, Diamond Lake

Gilmer Road Lift Station Lift Station

Address 1 25721 N Gilmer Road

Dialer: Phonetics Sensaphone 847-566-6354

Electrical Account: COM ED 27276-73021

BOSS 4814547 - 48110

IEPA PERMT 1987-IA-3361

IEPA PERMT 1987-IA-3361: 1987-IA-3361

PUMP 1

PUMP 2

EDC.# 27276773021

ELECTRICAL ADDRESS: 21190 COMMERICAL DROTHR 4547. ELA TWP IL

4833152: Half Day (Palma-Darby) Lift Station, Vernon Hills

Half Day Lift Station Lift Station

Address: 1330 S Milwaukee Ave, Vernon Hills Behind the stores in an easment)

Dialer: Sensaphone 847-793-0635

BOSS 4833152-48110

Generator Yes

IEPA PERMIT 2008-IA-1396

IEPA PERMIT 2008-IA-1396: 2008-IA-1396

PUMP 1

PUMP 2

EDC.# 4203014059

Electrical Address: LIFT SRARN1220 S MILWAIKEE AVE, VERNON HILLS IL

4876944: Hanlon Road Lift Station, Green Oaks

Hanlon Road Lift Station Lift Station

Address 31300 N. Hanlon Rd, Green Oaks

Dialer: Phonetics Sensaphone 847-816-8443

BOSS 4876944 - 48210

Generator Yes

EDC.# NOT TRACKING

4833141: Hawthorn Center Lift Station, Vernon Hills

Hawthorn Center Lift Station Lift Station

Address 294 Townline Rd, Vernon Hills IL 60031

Phone NA

Dialer: Phonetics Sensaphone 847-247-0837

BOSS 4833141 - 48110

IEPA PERMIT 1987-IA-1988

IEPA PERMIT 1987-IA-1988: 1987-IA-1988

PUMP 1

PUMP 2

EDC.# NOT TRACKING

4814546: Hilgers Court Pump Station, Diamond Lake

Hilgers Court Pump Station Lift Station

Address 25532 N. Hilgers Ct. Mundelein Il 60060

Dialer: Phonetics Sensaphone 847-566-0873

BOSS 4814546-48110

IEPA PERMIT 2011-1A-0983

IEPA PERMIT 2011-1A-0983: 2011-1A-0983

Generator Yes

EDC.# 0403145175

ELECTRICAL ADDRESS: PUMP25532 N Hilers Ct, default IL

4876940: Lexington Road Lift Station, Green Oaks

Lexington Road Lift Station Lift Station

Address 2082 E. Lexington Rd., Green Oaks

Dialer: Phonetics Sensaphone 847-918-1252

Electrical Account: COM ED 04222-26006

BOSS 4876940 - 48210

Generator Yes

IEPA PERMIT 1986-IA-1240

IEPA PERMIT 1986-IA-1240: 1986-IA-1240

EDC.# NOT TRACKING

4814544: Maple Street Lift Station, Diamond Lake

Maple Street Lift Station Lift Station

Address 26312. Maple St

Dialer: Phonetics Sensaphone 847-837-8480

Electrical Account: COM ED 12013-12004

BOSS 4814544 - 48110

IEPA PERMIT 1971-IA-909

IEPA PERMIT 1971-IA-909: 1971-IA-909

IEPA PERMIT 1971-IA-909-2: 1971-IA-909-2

IEPA PERMIT 201 3-18-0923: 201 3-18-0923

Generator Yes

PUMP 1

MOTOR MODEL: TRDP

PUMP MODEL: 4FNM10

PUMP SERIAL NUMBER: 521428

SERIAL NUMBER: 7202

2/2005: DRYON REBUILT MOTOR & REKEYED SHAFT,

NEW SHAT AND NEW IMPELLER AND SEAL (11841)

FRAME: 215TPZ

MOTOR: WESTINGHOUSE

HORSE POWER: 5

PUMP 2

EDC.# 0927037143

ELECTRICAL ADDRESS: 26340 N ELMWOOD AVE, MUNDELINE IL

4814549: Middleton Lift Station, Countryside Lake

Middleton Lift Station Lift Station

Address 26219 N. Middleton Pkwy.

Dialer: Sensaphone 847-566-5516

Electrical Account: COM ED 15515-73008

Gas Account: NICOR 5-03-80-1630-8

BOSS 4814549 - 48110

Generator Yes

IEPA PERMIT

IEPA PERMIT 2000-IA-0779: 2000-IA-0779

PUMP 1

IMPELLER DIAMETER: 6.90

MANUFACTURE: Hydromatic

MODEL: 54N500m 3-4 4-91

PHASE: 3 PHASE 60 Hz 15.3 AMPS

SERIAL NUMBER: 56899

AMPS: 17.9

BC: W

HORSE POWER: 10 HP

PUMP2

IMPELLER DIAMETER: 6.90"

MANUFACTURE: Hydromatic

MODEL: 54N500M3-4 7-92

PHASE: 3 PHASE 60 Hz

SERIAL NUMBER: 511519

VOLTAGE: 230

AMPS: 15.3 (FULL LOAD)

HORSE POWER: 5 HP

EDC.# 1551573017

ELECTRICAL ADDRESS: 57 MIDDLETON PKWY OTHR 4549, LONG GROVE IL

4833145: Milwaukee Avenue Pump Station (RT 21), Vernon Hills

Rt 21 Milwaukee Ave Lift Station Lift Station

Address 10 N. Milwaukee Ave.

Dialer: Phonetics Sensaphone 847-955-0841

Electrical Account: COM ED 04341-54006

BOSS 4833145 - 48110

IEPA PERMIT 1986-IA-0975-1

IEPA PERMIT 1986-IA-0975-1: 1986-IA-0975-1

IEPA PERMIT 1998-IB-0045: 1998-IB-0045

PUMP 1 A

PUMP 2 A

PUMP 3 A

PUMP 1 B

PUMP 2 B

PUMP 3 B

4811440: NLE Levee Storm Water Pump Station, N. Libertyville Estate

Levee N. Libertyville Estate (Storm Water Station) Lift Station

BOSS 4811440 - 0000

LEVEE PUMP 1

LEVEE PUMP 2

TOE PUMP 1

TOE PUMP 2

TOE PUMP 3

EDC.# NOT TRACKING

4814543: Oakdale Lane Lift Station, Diamond Lake

Oakdale Lane Lift Station Lift Station

Address 26661 Oakdale Lane

Dialer: Phonetics Sensaphone 847-566-6978

Electrical Account: COM ED 23771-47005

BOSS 4814543 - 48110

IEPA PERMIT

- IEPA PERMIT 1971-IA-909: 1971-IA-909
- IEPA PERMIT 1971-IA-909-2: 1971-IA-909-2

PUMP 1

- IMPELLER DIAMETER: 6.500"
- INSTALLED: 12/2005
- MANUFACTURE: HYDROMATIC
- MODEL: S4N300M3-4
- PHASE: 360
- SERIAL NUMBER: S98342
- HORSE POWER: 3

PUMP 2

- IMPELLER DIAMETER: 6.500"
- INSTALLED: 12/2005
- MANUFACTURE: HYDROMATIC
- MODEL: S4N300M3-4
- PHASE: 360
- SERIAL NUMBER: S98343
- HORSE POWER: 3

EDC.# 0437077015

ELECTRICAL ADDRESS: 26657A N OAKDALE AVE, 4543, FREMONT TWP IL

4876941: O'Plaine Road Lift Station, Green Oaks

O'Plaine Road Lift Station Lift Station

Address 1821 N. O'Plaine Rd, Green Oaks

Dialer: Phonetics Sensaphone 847-918-8780

Electrical Account: COM ED 02683-97002

BOSS 4876941 - 48210

Generator Yes

IEPA PERMIT 1986-I1-1270

IEPA PERMIT 1986-I1-1270: 1986-I1-1270

IEPA PERMIT 1990-IA-4760: 1990-IA-4760

4876942: Polo Trail Road Lift Station, Green Oaks

Polo Trail Drive Lift Station Lift Station

Address 13690 W. Polo Trail Dr.

Dialer: Phonetics Sensaphone 847-816-3113

Electrical Account: COM ED 04222-29007

BOSS 4876942 - 48210

Generator Yes

EDC.# NOT TRACKING

4833220: Raw West Pumping Station, Vernon Hills WRF

Raw West Pump Station Vernon Hills Lift Station

Address 25 Cherokee Rd (in the park)

Dialer: Phonetics Sensaphone 847-549-0221

BOSS 4833220 - 48230

IEPA PERMIT 1988-IA-4311

IEPA PERMIT 1988-IA-4311: 988-IA-4311

PUMP 1

PUMP 2

PUMP 3

PUMP 4

PUMP 5

PUMP 6

EDC.# NOT TRACKING

4876943: Rockland Road Lift Station, Green Oaks

Rockland Road Lift Station Lift Station

Address 28859 Forest Lake Ln., Green Oaks

Dialer: Phonetics Sensaphone 847-247-9640

Electrical Account: COM ED N /A

BOSS 4876943 - 48210

Generator Yes

IEPA PERMIT 1994-IA-2458

IEPA PERMIT 1994-IA-2458: 1994-IA-2458

EDC.# NOT TRACKING

4833146: Southfield Drive Lift Station, Vernon Hills

Southfield Drive Lift Station Lift Station

Address 205 Southfield Dr., Vernon Hills

Dialer: Phonetics Sensaphone 847-918-0945

Electrical Account: COM ED 04341-54006

Gas Account: North Shore Gas 2 5000 2662 7094

BOSS 4833146 - 48110

GENERATOR Yes

IEPA PERMIT 2005-IB-4353

IEPA PERMIT 2005-IB-4353: 2005-IB-4353

PUMP 1

PUMP 2

EDC.# NOT TRACKING

4811240: Sprucewood Lane, Countryside Manor Lift Station

Sprucewood Lane Lift Station Lift Station

Address

Sprucewood Lift Station:

15741 W. Sprucewood Ln., Libertyille, IL 60048:

Libertyille, IL 60048:

Dialer: Sensaphone 847-918-9842

Electrical Account: COM ED 02707-01007

Gas Account: North Shore Gas 2 5000 2662 7220

BOSS 4811240 - 48210

MOTOR 1

MANUFACTURE: Marathon Electric

MODEL: HFZ15TTDR7681BD-F1W

RPM: 1160

SERIAL NUMBER: 1448683

FRAME: 215 HP

HORSE POWER: 5

PUMP 1

IMPELLER DIAMETER: 8 1/16

MANUFACTURE: FAIRBANKS MORSE PUMP

MODEL: A544C

SEAL (PART NUMBER): 113218

SERIAL NUMBER: K3B1083232

TYPE: 4 X 6 INCH

FIGURE: 5442C

HORSE POWER: 5

GPM: 450

MOTOR 2

MANUFACTURE: MARTHON ELECTRIC

MODEL: HFZ15TTDR7681BD-F1W

RPM: 1160

SERIAL NUMBER: 1448684

FRAME: 215 HP

HORSE POWER: 5

PUMP 2

IMPELLER DIAMETER: 8 1/16

MANUFACTURE: FAIRBANKS MORSE PUMP

MODEL: A544C

SEAL (PART NUMBER): 113218

SERIAL NUMBER: K3B1083232-1

TYPE: 4 X 6 INCH

FIGURE: 5442C

HORSE POWER: 5

GPM: 450

Generator Yes

EDC.# 1755050019

4814540: Sylvan-Diamond Lake Lift Station, SDL Treatment Plant

Sylvan-Diamond Lake Lift Station @ Treatment Plant Lift Station

Address 26499 N. Midlothian Road

Sylvan-Diamond Lake Lift Station:

26055 N. Midlothian Road:

Mundelein IL 60060:

City Mundelein IL 60060

Phone NA

BOSS 4814540-48110

IEPA PERMIT

IEPA PERMIT 1971-AB-403: 1971-AB-403

IEPA PERMIT 1999-IA-3444: 1999-IA-3444

IEPA PERMIT 201 1-1B-1569: 201 1-1B-1569

PUMP 1

PUMP 2

EDC.# 1551583004

4833148: W. W. Grainger Lift Station, Vernon Hills

W. W. Grainger Lift Station Lift Station

Address 14195 W. Hwy 60

Phone NA

Dialer: Sensaphone 847-549-8809

Electrical Account: COM ED 53130-53025

Gas Account: North Shore Gas 0 5000 0851 6535

BOSS 4833148 - 48110

IEPA PERMIT 1995-IA-4911

IEPA PERMIT 1995-IA-4911: 1995-IA-4911

IEPA PERMIT 1995-IA-4911-1: 1995-IA-4911-1

IEPA PERMIT 1995-IA-4911-2: 1995-IA-4911-2

IEPA PERMIT 1999-IA-3818: 1999-IA-3818

IEPA PERMIT 2009-IB-1973: 2009-IB-1973

PUMP 1

PUMP 2

EDC.# NOT TRACKING ATM

4814545: West Shore Drive Lift Station, Diamond Lake

West Shore Drive Lift Station Lift Station

Address 19521 West Shore Dr.

Dialer: Sensaphone 847-566-6312

Electrical Account: COM ED 23771-81007

Gas Account: North Shore Gas 2 5000 2662 6814

BOSS 4814545 - 48110

Generator Yes

IEPA PERMIT 1971-IA-909

IEPA PERMIT 1971-IA-909: 1971-IA-909

IEPA PERMIT 1971-IA-909-2: 1971-IA-909-2

PUMP 1

PUMP 2

EDC.# 18230004058

ELECTRICAL ADDRESS: 19521 WEST SHORE DR, 4545, FREMONT TWP IL

4833143: Westmoreland Drive Lift Station, Vernon Hills

Westmoreland Drive Lift Station Lift Station

Address 985 Westmoreland

Dialer: Phonetics Sensaphone 847-247-9564

Electrical Account: COM ED 04341-54006

BOSS 4833143 - 48110

PUMP 1

PUMP 2

EDC.# NOT TRACKING

NORTH- LIFT STATIONS

Site Information

4867256: Beechwood Drive Lift Station, Northwest

Beechwood Lift Station Lift Station

Address 1 W. Beechwood

Dialer: Sensaphone 847-740-0909

Phone - Line 847-740-0909

Electrical Account: COM ED 08086-99005

Gas Account: NICOR 5-28-74-6570-1

BOSS 4867256 - 48210

Generator Yes

EDC.# 0808699005

ELECTRICAL ADDRESS: 0 S MIDLAND OTHR 7256, 1W BEACHWOOD, ROUNDLAKE BEACH IL

Pump 1

GPM: 900

Pump 2

GPM: 900

Pump 3

GPM: 900

: Blackhawk Lift Station, LRSD

4867447: Chesney Drive Lift Station, Northwest

Chesney Drive Lift Station Lift Station

Address 25463 W. Chesney Dr.

Dialer: Sensaphone 1104 847-265-1274

Electrical Account: COM ED 18142-87003

BOSS 4867447 - 48210

IEPA PERMIT 1977-IA-3632

IEPA PERMIT 1977-IA-3632: 1977-IA-3632

Generator No

EDC.# 1814287012

ELECTRICAL ADDRESS: 25463 CHESNEY DR, LAKE VILLA TWP IL

4867448: Columbia Bay Drive Lift Station, Northwest

Columbia Bay Drive Lift Station Lift Station

Address 25255 W. Columbia Bay Dr.

Dialer: 847-265-1481

Electrical Account: COM ED 23162-11008

BOSS 4867448 - 48210

IEPA PERMIT 1977-IA-3632

IEPA PERMIT 1977-IA-3632: 1977-IA-3632

Generator No

EDC.# 3125104031

EDC.# 3125104031

ELECTRICAL ADDRESS: 25255 W COLIMBIA BAY DR, 7448. FOX LAKE HILLS IL

4867449: Columbia Bay Road Lift Station, Northwest

Columbia Bay Road Lift Station Lift Station

Address 25321 W. Columbia Bay Rd.

Dialer: Sensaphone 1104 847-265-1619

Electrical Account: COM ED 17280-40007

BOSS 4867449 - 48210

IEPA PERMIT 1977-IA-3632

IEPA PERMIT 1977-IA-3632: 1977-IA-3632

Generator No

EDC.# 1728040007

ELECTRICAL ADDRESS: 25321 COLUMBIA BAY RD, LAKE VILLIA TWP IL

4867454: Dering Lane Lift Station, Northwest

Dering Lane Lift Station Lift Station

Address 24925 W. Dering Ln.

Dialer: 847-265-1898

Electrical Account: COM ED 17280-65004

BOSS 4867454 - 48210

IEPA PERMIT 2002-IA-0656

IEPA PERMIT 2002-IA-0656: 2002-IA-0656

EDC.# 1728065004

ELECTRICAL ADDRESS: 0 S DERING LN OTHR 7454, 1E 059 RT, ANTIOCH IL

4867220: East Main Pump Station, Northwest

East Main Street Pump Station Lift Station

Address 25326 West Main Street, Long Lake, IL

Dialer: Phonetics Sensaphone Express II 847-546-3991

Electrical Account: COM ED 01322-90003

Gas Account: NICOR 5-04-96-2070-0

BOSS 4867220 - 48210

IEPA PERMIT 1977-IC-3629

IEPA PERMIT 1977-IC-3629: 1977-IC-3629

EDC.# 0132290003

ELECTRICAL ADDRESS: 1712 MAIN ST OTHR 7220, INGLESIDE IL

4823347: Forest Drive Lift Station, Arbor Vista

Forest Drive Lift Station Lift Station

Address 32514 Forest Dr.

Dialer: Phonetics Sensaphone 847-543-8965

Electrical Account: COM ED 32330-64002

Gas Account: North Shore Gas 2 5000 2662 3835

BOSS 4823347 - 48110

IEPA PERMIT 1998-IA-1026

IEPA PERMIT 1998-IA-1026: 1998-IA-1026

PUMP 1

PUMP 2

EDC.# 2811119045

ELECTRICAL ADDRESS: 32514 FORESTDR, 3347, GRAYSLAKE IL

: Forest Lift Station, LRSD

4867481: Ingleside Shore Drive Lift Station, Northwest

Ingleside Shore Lift Station Lift Station

Address 25487 W Ingleside Shore Rd

Dialer: 847-973-0894

BOSS 4867481-48210

EDC.# 1646717009

ELECTRICAL ADDRESS: 0 S INGLESIDESHER OTHR 7441, 1W SHORE RD, GRAYSLAKE IL

4867444: Jackson Road Lift Station, Northwest

Jackson Road Lift Station Lift Station

Address 36667 N. Jackson

Dialer: 847-587-4968

Electrical Account: COM ED 18141-05006

BOSS 4867444 - 48210

IEPA PERMIT 1977-IA-3630

IEPA PERMIT 1977-IA-3630: 1977-IA-3630

EDC.# 0393134051

ELECTRICAL ADDRESS: 36667 JACKSON RD, INGLESIDE IL

: JCYS Lift Station, LRSD

4823342: Lake & Oak Avenue Lift Station, Highland Lake

Lake & Oak Lift Station (Highland Lake) Lift Station

Address NS Lake, 1W. Oak

Dialer: Phonetics Sensaphone 847-548-5098

Electrical Account: COM ED 02225-96027

BOSS 4823342 - 48110

PUMP 1

PUMP 2

EDC.# 21311633056

ELECTRICAL ADDRESS: 21870A W LAKE AVE, 3342, GRAYSLAKE IL

4823344: Lake Avenue Lift Station, Third Lake

Lake Avenue Lift Station (Third Lake) Lift Station

Address 89 N. Lake Ave.

Dialer: Phonetics Sensaphone 847-548-4303

Electrical Account: COM ED 23221-59019

BOSS 4823344 - 48110

IEPA PERMIT 1975-IA-834-C

IEPA PERMIT 1975-IA-834-C: 1975-IA-834-C

PUMP 1

PUMP 1

EDC.# 1438028026

4867486: Lake Shore Drive Lift Station, Northwest

Lake Shore Drive Lift Station Lift Station

Address 37010 N. Lake Shore Dr.

Dialer: Sensaphone 847-587-4978

Electrical Account: COM ED 24867-25000

BOSS 4867446 - 48210

IEPA PERMIT 1977-IA-3630

IEPA PERMIT 1977-IA-3630: 1977-IA-3630

EDC.# 1543108122

ELECTRICAL ADDRESS: 37010N LAJKE SHORE DR, LAKE VILLA TWP IL

4823343: Lakeside Drive Lift Station, Highland Lake

Lakeside Drive Lift Station (Highland Lake) Lift Station

Address 34240 N. Lakeside Dr.

Dialer: Phonetics Sensaphone 847-548-4925

Electrical Account: COM ED 02225-97006

BOSS 4823343 - 48110

PUMP 1

PUMP 2

EDC.# 0507103102

ELECTRICAL ADDRESS: 34240 E LAKESIDE, E/S LAKESHORE 3343, GRAYSLAKE IL

: Longbeach Lift Station, LRSD

4867451: North Cedar Crest Drive Lift Station, Northwest

North Cedar Crest Drive Lift Station Lift Station

Alarm Alert #14

Dialer: Phonetics Sensaphone 847-265-5689

Electrical Account: COM ED 16446-92009

BOSS 4867451 - 48210

SCADA Yes

IEPA PERMIT 1977-IA-3632

IEPA PERMIT 1977-IA-3632: 1977-IA-3632

EDC.# 1644692009

4867453: North Highwoods Drive Lift Station, Northwest

North Highwoods Drive Lift Station Lift Station

Address 25201 W. Forest Dr.

Alarm Alert #16

Electrical Account: COM ED 16446-46007

Gas Account: NICOR 5-33-88-5260-0

BOSS 4867453 - 48210

SCADA Yes

EDC.# 1644646007

Electrical Address: 0 N HIGHWOOD DR OTHR 7453, 1W FOREST, PETITE LAKE IL

4822620: Northeast Central Pumping Station, (NEC)

NEC Pump Station Lift Station

Address 500 Barron, Old Grayslake

Phone 847-223-8088

Door Key: A8#11 Map W-88

Dialer: Duofone Sensor Alert 847-223-8088

Account: COM ED -1 #2602 02200-44011

Account: COM ED - 2 #2620 02033-05006

Gas Account: North Shore Gas 5 5000 0277 6861

BOSS 4822620 - 48210

IEPA PERMIT 1975-IA-476-COP

IEPA PERMIT 1975-IA-476-COP: 1975-IA-476-COP

IEPA PERMIT 2009-IB-2713: 2009-IB-2713

Generator Yes

PUMP 1

PUMP 2

PUMP 3

EDC.# 0203305006

Address: 33987 N RT 45 unit 2620, 350, 1W RT 45, Grayslake Il

4867443: Oak Circle Lift Station, Northwest

Oak Circle Lift Station Lift Station

Address 36722 N. Ridge Ave.

Dialer: 847-587-4967

Electrical Account: COM ED 24864-64011

BOSS 4867443 - 48210

IEPA PERMIT 1977-IA-3630

IEPA PERMIT 1977-IA-3630: 1977-IA-3630

EDC.# 1109056038

: Oak Lift Station, LRSD

4867445: Orchard Avenue Lift Station, Northwest

Orchard Avenue Lift Station Lift Station

Address 27665 W. Orchard

Alarm Alert #8

Dialer: Sensaphone 1104 847-587-7973

Electrical Account: COM ED 18141-26005

BOSS 4867445 - 48210

IEPA PERMIT 1977-IA-3630

IEPA PERMIT 1977-IA-3630: 1977-IA-3630

EDC.# 1814126005

: Park & Reed Lift Station, LRSD

4867222: Petite Lake Road Pump Station, Northwest

Petite Lake Road Pump Station Lift Station

Address 39075 N. Hwy 59

Alarm Alert #3

Dialer: 847-356-4376

Electrical Account: COM ED 01323-52008

Gas Account: NICOR 5-33-88-4900-2

BOSS 4867222 - 48210

IEPA PERMIT 1977-IC-3629

IEPA PERMIT 1977-IC-3629: 1977-IC-3629

EDC.# 0132352008

4867221: Rollins Road Pump Station, Northwest

Rollins Road Pump Station Lift Station

Address 25265 W. Rollins Rd. Ingleside, IL 60041

Alarm Alert #2

Dialer: 847-587-2256

Electrical Account: COM ED 00505-47003

Gas Account: NICOR 5-21-70-3910-5

BOSS 4867221 - 48210

IEPA PERMIT 1977-IC-3629

IEPA PERMIT 1977-IC-3629: 1977-IC-3629

EDC.# 0050547003

4867255: Round Lake Sanitary District Lift Station, Northwest

Round Lake Sanitary District Lift Station Lift Station

Address 600 Sunset Dr.

Alarm Alert #18

Electrical Account: COM ED 02206-12008

BOSS 4867255 - 48210

EDC.# 0259093046

4823346: Seafarer Drive Lift Station, Mariner's Cove

Seafarer Drive Lift Station Lift Station

Address 402 W. Seafarer Dr.

Dialer: Heath House Sitter 847-548-4526

Electrical Account: COM ED 02226-05003

BOSS 4823346 - 48110

IEPA PERMIT 1986-IA-0066

IEPA PERMIT 1986-IA-0066: 1986-IA-0066

PUMP 1

IMPELLER BOLT PART NUMBER: 37116

IMPELLER DIAMETER: 7.12"

IMPELLER PART NUMER: 39812 - 84895VE

IMPELLER WASHER PART NUMBER: 70089

MANUFACTURE: Peabody Barnes

MODEL: 4SEH-302

SEAL (PART NUMBER): 39485

SERIAL NUMBER: 300818

SHIMS PART NUMBER: 1348 & 1349

VOLUTE PART NUMER: 66292

GASKET PART NUMBER: 36852

HORSE POWER: 4.5 HP

PUMP 2

IMPELLER BOLT PART NUMBER: 37116

IMPELLER DIAMETER: 7.12"

IMPELLER PART NUMER: 39812 - 84895VE

IMPELLER WASHER PART NUMBER: 70089

MANUFACTURE: Peabody Barnes

MODEL: 4SEH-302

SEAL (PART NUMBER): 39485

SERIAL NUMBER: 300819

SHIMS PART NUMBER: 1348 & 1349

VOLUTE PART NUMER: 66292

GASKET PART NUMBER: 36852

HORSE POWER: 4.5 HP

EDC.# 1299046031

4867450: South Cedar Crest Drive Lift Station, Northwest

South Cedar Crest Drive Lift Station Lift Station

Dialer: Sensaphone 1104 847-265-5688

Electrical Account: COM ED 16445-72002

BOSS 4867450 - 48210

SCADA No

IEPA PERMIT 1977-IA-3632

IEPA PERMIT 1977-IA-3632: 1977-IA-3632

EDC.# 1644572002

4867452: South Highwoods Drive Lift Station, Northwest

South Highwoods Drive Lift Station Lift Station

Address 24917 W. North Rd.

Dialer: 847-356-7246

Electrical Account: COM ED 16447-03007

BOSS 4867452 - 48210

SCADA Yes

IEPA PERMIT 1998-IB-0209

IEPA PERMIT 1998-IB-0209: 1998-IB-0209

EDC.# 1644703007

4867442: Stanton Bay Road Lift Station, Northwest

Stanton Bay Drive Lift Station Lift Station

Address 36934 N. Stanton Point Rd

Dialer: Phonetics Sensaphone Express II 847-587-4953

Electrical Account: COM ED 16467-18006

BOSS 4867442 - 48210

IEPA PERMIT 1977-IA-3630

IEPA PERMIT 1977-IA-3630: 1977-IA-3630

EDC.# 1646718006

4843642: Streamwood Lift Station, Grandwood Park

Streamwood Lift Station Lift Station

Address 36481 N. Streamwood Dr.

Dialer: Phonetics Sensaphone 847-245-7352

Electrical Account: COM ED 13860-33004

BOSS 4843642 - 48110

IEPA PERMIT 1968-1A-872

IEPA PERMIT 1968-1A-872: 1968-1A-872

PUMP 1

PUMP 2

EDC.# 1386033004

ELECTRICAL ADDRESS: 36481 N STREAMWOOD DRTHR 3642, GURNEE IL

: Sunnybrook Lift Station

4823341: Washington Street Lift Station, Highland Lake

Washington Street Lift Station Lift Station

Address 22001 W. Washington St.

Dialer: Phonetics Sensaphone 847-223-4843

Electrical Account: COM ED 02225-98003

BOSS 4812242 - 48110

IEPA PERMITS

IEPA PERMIT 2015-18-60223: 2015-18-60223

PUMP 1

PUMP 2

EDC.# 3635028001

4823349: Washington Street Storm Water Station

Washington Street Storm Water Station Lift Station

Address 190 W. Washington St.

Dialer: Phonetics Sensaphone 847-223-0233

SOUTHEAST - LIFT STATIONS

Site Information

4854746: Arlington Height Road Lift Station,Southeast

Arlington Heights Road Lift Station Lift Station

Dialer: Phonetics Sensaphone 847-537-7210

Electrical Account:

COM ED: 20431-56003

Gas Account:

NICOR: 5-15-72-2920-3

BOSS 4854746 - 48110

4854746 - 48110:

PUMP 1

MANUFACTURE: Hydromatic Pump

MODEL: SH200M3-6

PUMP 2

Generator Yes

Generator: Yes:

EDC.# 2043156003

ELECTRICAL ADDRESS: 20940 N ARLINGTONHTS RD, LONG GROVE IL

4854320: Building 20 Raw Wastewater Pumping Station Battery- B, Des Plaines River WRF

Building 20 DPR Raw Wastewater Pumping Station Battery- B Lift Station

IEPA PERMIT 192-AA-1075

IEPA PERMIT 192-AA-1075: 192-AA-1075

Generator No

4854761: Checker Road Lift Station, Southeast

Checker Road Lift Station Lift Station

Address 1782 Checker Rd Long Grove, IL 60047

Dialer: 847-550-0894

Phone 847-550-0924

Electrical Account: COM ED 3513023065

Gas Account: NICOR 5613322432

BOSS 4854761 - 48110

IEPA PERMIT 2007-IA-3030

IEPA PERMIT 2007-IA-3030: 2007-IA-3030

IEPA PERMIT 2007-IA-3030-1: 2007-IA-3030-1

Generator Yes

PUMP 1

PUMP 2

EDC.# 3513023065

ELECTRICAL ADDRESS: LIFT STATION1782 CHECKER RD, IL LONG GROVE

4854747: Chicory Lane Lift Station, Southeast

Chicory Lane Lift Station Lift Station

Address 15 Chicory Ln. Riverwoods

Dialer None

Electrical Account: COM ED 04341-69007

BOSS 4854747 - 48110

Generator No

PUMP 1

PUMP 2

EDC.# NOT TRACKING ATM

4876501: Deer Park Lift Station (Long Grove), Southeast

Deer Park Long Grove Rd Lift Station Lift Station

Address Long Grove Rd (Just Before Rt 12)

Dialer: 847-438-1934

BOSS 4876501-48210

EDC.# NOT TRACKING ATM

4854241: Deerfield Road Lift Station, Southeast

Deerfield Rd Lift Station Lift Station

Address 3501 Deerfield Rd, Riverwoods

Dialer: Heath House Sitter 847-945-9583

Electrical Account: COM ED 20305-87003

BOSS 4854241 - 48120

IEPA PERMIT 1994-IA-1379

IEPA PERMIT 1994-IA-1379: 1994-IA-1379

IEPA PERMIT 1994-IA-1379-1: 1994-IA-1379-1

PUMP 1

PUMP 2

EDC.# 2030587012

ELECTRICAL ADDRESS: 3501 DEERFIELD RD, DEFAULT

4854322: Des Plaines River WRF, Raw Wastewater Pumping Station Battery- A

Address 15501 W. Deerfield Pkwy.

Dialer: In Plant Number 42201

Electrical Account: COM ED 01115-51001

Gas Account: University of Illinois at Chicago 2 5000 0221 7497

BOSS 4854320 - 48230

IEPA PERMIT 192-AA-1075

IEPA PERMIT 192-AA-1075: 192-AA-1075

4854248: Ela Lift Station, Southeast

Ela Lift Station Lift Station

Address 20139 W. Hwy 22

Dialer: Phonetics Sensaphone 847-438-5525

Electrical Account: COM ED 20431-30009

BOSS 4854248 - 48120

IEPA PERMIT 1971-AA-103-1

IEPA PERMIT 1971-AA-103-1: 1971-AA-103-1

GENERATOR Yes

PUMP 1

PUMP 2

PUMP 3

EDC.# 0275027059

ELECTRICAL ADDRESS: 20139 W HIGHWAY 22, KILDEER IL

4854755: Hill Top Lane Lift Station, Southeast

Hill Top Lane Lift Station Lift Station

Address 5244 Hilltop Rd.

Dialer: Heath House Sitter 847-634-0858

Electrical Account: COM ED 11122-07003

BOSS 4854755 - 48110

IEPA PERMIT 1988-IB-1584

IEPA PERMIT 1988-IB-1584: 1988-IB-1584

PUMP 1

PUMP 2

EDC.# 1112207003

ELECTRICAL ADDRESS: 5244 HILLTOP RD OTHR 4755, WAUKEGAN IL

EDC.# 1112207003

Electrical Address: 5211 HILLTOP ES OTHR 4755, WAUKEGAN IL

4854742: Lake-Cook Road Lift Station, Southeast

Lake Cook Road Lift Station Lift Station

Address East of Tollway

Dialer: Phonetics Sensaphone 847-948-5338

Electrical Account: COM ED 22321-30006

BOSS 4854742 - 48110

IEPA PERMIT 2000-IB-0577

IEPA PERMIT 2000-IB-0577: 2000-IB-0577

PUMP 1

MANUFACTURE: Smith & Loveless

MODEL: S12E4B2A

SERIAL NUMBER: 690442560

PUMP 2

MANUFACTURE: Smith & Loveless

MODEL: S12E4B2A

SERIAL NUMBER: 667541118

4854771: Lakeridge Court Lift Station (Tall Oaks Kildeer), Southeast

Lakeridge Ct Lift Station (Tall Oaks Kildeer) Lift Station

Address 20746 W Lakeridge Ct. Kildeer

Dialer 847-550-0460

Management Center 4854771 - 48110

PUMP 1

PUMP 2

EDC.# 8439087035

ELECTRICAL ADDRESS: 0 E CUBA RD, SS TALL OAKS DR, KILDEER IL

4854744: Lakes of Long Grove Lift Station, Southeast

Lakes of Long Grove Lift Station Lift Station

Address 21870 N. Three Lakes Dr.

Dialer: Phonetics Sensaphone 847-478-0268

Electrical Account: COM ED 09512-53008

Gas Account: NICOR 5-15-71-2040-2

BOSS 4854744 - 48110

PUMP 1

PUMP 2

EDC.# 0951253008

ELECTRICAL ADDRESS: 0 W THREELAKES DROTHR 4744, 1 N LONGGROVE, LONG GROVE IL

4854760: Old McHenry Road Lift Station, Southeast

Old McHenry Road Lift Station Lift Station

Address 23374 N. Old McHenry Rd

Dialer: Phonetics Sensaphone 847-540-6285

BOSS 4854760 - 48110

IEPA PERMIT 2005-IA-4118

IEPA PERMIT 2005-IA-4118: 2005-IA-4118

PUMP 1

PUMP 2

EDC.# 0537122026

4854776: Plumwood Lift Station (Kildeer Glen), Southeast

Plumwood Lift Station (Kildeer Glen) Lift Station

Address 3539 Long Grove Rd Long Grove IL

Dialer 847-726-2415

Management Center 4854776 - 48110

PUMP 1

PUMP 2

EDC.# 6311073020

4854753: Port Clinton Road Lift Station, Southeast

Port Clinton Road Lift Station Lift Station

Address Oak Hills Sub

Dialer: Heath House Sitter 847-634-0635

Electrical Account: COM ED 21207-51002

BOSS 4854753 - 48110

IEPA PERMIT 1986-IA-1270

IEPA PERMIT 1986-IA-1270: 1986-IA-1270

PUMP 1

PUMP 2

EDC.# 2120751002

4854252: Portwine Road Lift Station, Southeast

Portwine Rd Lift Station Lift Station

Address 2790 W Lake Cook Rd., Riverwoods

Dialer: Phonetics Sensaphone 847-317-1624

Electrical Account: COM ED 20305-15007

BOSS 4854252 - 48120

IEPA PERMIT 2006-IB-1117

- IEPA PERMIT 2006-IB-1117: 2006-IB-1117

PUMP 1

- IMPELLER BOLT PART NUMBER: 2594-008-2
- IMPELLER DIAMETER: 10.5
- MANUFACTURE: HYDROMATIC
- MODEL: S6L300-M4-4
- SEAL QT. 2 PART NUMER: 1957-000-1
- SERIAL NUMBER: 14157
- VOLUTE PART NUMER: 8918-001-5
- WEAR RING PART NUMER: 4289-002-3
- HORSE POWER: 30 HP

PUMP 2

- IMPELLER BOLT PART NUMBER: 2594-008-2
- IMPELLER DIAMETER: 10.5
- MANUFACTURE: HYDROMATIC
- MODEL: S6L300-M4-4
- SEAL (PART NUMBER): 1957-000-1
- SERIAL NUMBER: 14158
- VOLUTE PART NUMER: 8918-001-5
- WEAR RING: 4289-002-3
- HORSE POWER: 30 HP

PUMP 3

- IMPELLER BOLT PART NUMBER: 2594-008-2
- IMPELLER DIAMETER: 10.5
- MANUFACTURE: HYDROMATIC
- MODEL: S6L300-M4-4
- SEAL QT. 2 PART NUMER: 1957-000-1
- SERIAL NUMBER: 14156
- VOLUTE PART NUMER: 8918-001-5

WEAR RING PART NUMER: 4289-002-3

HORSE POWER: 30 HP

EDC.# 203015007

4854772: Prairie Lane Lift Station (Prairie Creek Kildeer), Southeast

Prairie Lane Lift Station (Prairie Creek Kildeer) Lift Station

Address 22140 Prairie Lane Kildeer

Dialer 847-550-0485

Management Center 4854772 - 48110

PUMP 1

PUMP 2

EDC.# 2570125032

4854759: Prairie Trails Lift Station, Southeast

Prairie Trails Lift Station Lift Station

Dialer: Phonetics Sensaphone 847-566-0654

BOSS 4854759 - 48110

IEPA PERMT 1999-IA-3713

IEPA PERMT 1999-IA-3713: 1999-IA-3713

IEPA PERMT 2003-IA-2764: 2003-IA-2764

PUMP 1

PUMP 2

EDC.# 2478016038

ELECTRICAL ADDRESS: 6360 N GILMER RD, LIFT STATION, LONG GROVE IL

4854775: Quentin Road Lift Station (Pond of Quentin / Ponds of Kildeer), Southeast

Quentin Rd Lift Station (Pond of Quentin / Ponds of Kildeer) Lift Station

Address 21658 N. Quentin Rd Kildeer Il

Dialer 847-550-8821

Management Center 4854775 - 48110

PUMP 1

PUMP 2

EDC.# 3100096010

4854749: Ravine Drive Lift Station, Southeast

Ravine Drive Lift Station Lift Station

Address 21615 W. Ravine Dr., Forest Lake

Dialer: Phonetics Sensaphone 847-726-0252

Electrical Account: COM ED 19574-16000

BOSS 4854749 - 48110

IEPA PERMIT 2004-IA-1150-1

IEPA PERMIT 2004-IA-1150-1: 2004-IA-1150-1

PUMP 1

PUMP 2

EDC.# 195416000

4854773: Route 12 Lift Station (Market Place Kildeer), Southeast

Route 12 Lift Station (Market Place Kildeer: Whole Foods) Lift Station

Address Route 12 Market Place Shopping Center Kildeer

Dialer 874-550-1292

Management Center 4854773 - 48110

PUMP 1

PUMP 2

EDC.# NOT TRACKING

4854757: Royal Melbourne Lift Station, Southeast

Royal Melbourne Drive Lift Station Lift Station

Address 4699 Royal Melbourne Blvd

Dialer: Phonetics Sensaphone 847-634-4703

Electrical Account: COM ED 51230-76018

Gas Account: North Shore Gas 5 5000 1154 4206

BOSS 4854757 - 48110

IEPA PERMIT 1998-IB-1035

IEPA PERMIT 1998-IB-1035: 1998-IB-1035

PUMP 1

PUMP 2

EDC.# 51230796018

4854751: RT 22 Lift Station, Southeast

Rt 22 Lift Station (Oak Hills) Lift Station

Address Oak Hills Sub

Dialer: Phonetics Sensaphone 847-913-5361

Electrical Account: COM ED 21202-59003

BOSS 4854751 - 48110

IEPA PERMIT 2004-IB-1195

IEPA PERMIT 2004-IB-1195: 2004-IB-1195

PUMP 1

PUMP 2

4854770: S. Krueger Road Lift Station (Stirling Manor Kildeer), Southeast

S. Krueger Rd Lift Station (Stirling Manor Kildeer) Lift Station

Address 22750 S. Krueger Rd Kildeer

Dialer 847-726-8058

Management Center 4854770 - 48110

PUMP 1

PUMP 2

EDC.# 0877156039

4854243: Saunders Road Lift Station, Southeast

Saunders Rd Lift Station Lift Station

Address 1795 Saunders Rd, Riverwoods

Dialer: Heath House Sitter 847-374-0934

Electrical Account: COM ED 23661-12005

BOSS 4854243 - 48120

IEPA PERMIT 1985-IA-2351

IEPA PERMIT 1985-IA-2351: 1985-IA-2351

IEPA PERMIT 1990-IB-4713: 1990-IB-4713

PUMP 1

PUMP 2

EDC.# 2366112005

4854762: Sunset Grove Lift Station (Aptakisic Road) , Southeast

Sunset Grove Lift Station (Aptakisic Road & RT 83) Lift Station

Address Route 83 & Aptakisic Rd, Long Grove

Dialer: - Modem 847-793-8401

SCADA NO

BOSS 4854762-48110

IEPA PERMIT 2008-IA-1419

IEPA PERMIT 2008-IA-1419: 2008-IA-1419

PUMP 1

PUMP 2

4854754: Teal Lane Lift Station, Southeast

Teal Lane Lift Station Lift Station

Address 5811 Teal Lane, Long Grove

Dialer: Phonetics Sensaphone 847-913-1847

Electrical Account: COM ED 10285-14008

BOSS 4854754 - 48110

IEPA PERMIT 2010-IB-0429

IEPA PERMIT 1988-IB-0212: 1988-IB-0212

IEPA PERMIT 1988-IB-0212-1: 988-IB-0212-1

IEPA PERMIT 2010-IB-0429: 2010-IB-0429

PUMP 1

PUMP 2

EDC.# 1028514008

4854756: Thorngate Drive Lift Station, Southeast

Thorngate Dr Lift Station Lift Station

Address 640 Thorngate Ln., Riverwoods

Dialer: Phonetics Sensaphone 847-317-0043

BOSS 4854756 - 48110

IEPA PERMIT 1994-IA-0599

IEPA PERMIT 1994-IA-0599: 1994-IA-0599

PUMP 1

PUMP 2

EDC.# NOT TRACKING

4854750: Timberwoods Lift Station, Southeast

Timberwoods Lift Station Lift Station

Address 6 Timberwood Ln, Riverwoods

Electrical Account: COM ED 04341-69007

BOSS 4854750 - 48110

PUMP 1

PUMP 1

PUMP 2

EDC.# NOT TRACKING

4854745: Trillium Lane Lift Station, Southeast

Trillium Lane Lift Station Lift Station

Address 1781 Trillium Ln., Riverwoods

Dialer: Phonetics Sensaphone 847-945-3974

Electrical Account: COM ED 04341-69007

BOSS 4854745 - 48110

PUMP 1

PUMP 2

IMPELLER DIAMETER: 7.5

MODEL: SH150 M2-6

PHASE: 1 - 60 Hz

SERIAL NUMBER: S60732

SFA: 15.6 01-04

AMPS: 14.7 FULL LOAD

HORSE POWER: 1.5

EDC.# NOT TRACKING

4854758: Wellington Lift Station, Southeast

Wellington Drive Lift Station Lift Station

Address 4754 Wellington Dr., Long Grove

Dialer: Phonetics Sensaphone 847-634-2478

Electrical Account: COM ED 51230-76018

BOSS 4854758 - 48110

PUMP 1

PUMP 2

EDC.# NOT TRACKING

4854774: West Cuba Road Lift Station (Bishop Ridge Kildeer), Southeast

West Cuba Rd Lift Station (Bishop Ridge Kildeer) Lift Station

Address 22015 W. Cuba Rd Kildeer IL

Dialer 847-726-8831

Management Center 4854774 - 48110

PUMP 1

PUMP 2

EDC.# 2796078023

4854748: Whigam Road Lift Station,Southeast

Whigam Road Lift Station Lift Station

Address 1000 Whigham Rd, Riverwoods

Dialer NA

BOSS 4854748-48110

PUMP 1

PUMP 2

EDC.# NOT TRACKING

4854777: White Pine Lift Station (Quentin Collections Kildeer), Southeast

White Pine Lift Station Kildeer (Quentin Collections) Lift Station

Address 20771 N. Rand Rd Kildeer IL

Dialer 847-540-0262

Management Center 4854777 - 48110

BIOXIDE SYSTEM: Evoqua Water Technologies Don Jensen 815-252-9784

PUMP 1

PUMP 2

EDC.# 15211092134

Address: 20771L W Rand Rd, ELA TWP IL

ComEd Meter No 141658765

Appendix L – Safety Data Sheets (SDS)

U:\EMERGENCY PROCEDURES\SDS-MSDS Safety Data Sheets\00_SDS-MSDS ALPHABETICAL

Appendix M – Satellite Communities

▪ Services ▪

Lake County, through the Public Works Department, owns, operates and maintains twelve public water systems, seven sanitary sewer systems and five regional interceptor sewer systems. Public Works also provides wholesale sewer service, by contract, to various communities, municipalities and portions of municipalities.

Community	Water	Sewer		
		Local	Interceptor	Treatment
Antioch			LC	LC
Bannockburn		LC*	LC	LC
Buffalo Grove (Lake County portion)			LC	LC
Countryside Manor	LC	LC	LC	VL
Diamond Lake and Sylvan Lake		LC	LC	LC
Fox Lake Hills	LC	LC	LC	FL
Grandwood Park	LC	LC	LC	LC
Grayslake, Gurnee, Hainesville and Waukegan			LC	NS
Green Oaks	LC *		LC	VL
Indian Creek	LC	LC	LC	LC
Kildeer		LC	LC	LC
Knollwood-Rondout	LC			
Lake Zurich				LC
Long Grove	LC *	LC	LC	LC
Lincolnshire				LC
Mettawa	LC *	LC*	LC *	LC *
Mundelein		LC*	LC *	LC *
Pekara	LC	LC	LC	LC
Petite Lake and Stanton Bay		LC	LC	FL
Riverwoods			LC	LC
Third Lake, Highland Lake and Druce Lake	LC*	LC	LC	NS
Vernon Hills	LC	LC	LC	LC
Wildwood	LC	LC	LC	NS
Lakes Region Sanitary District (LRSD), Hainesville, Lake Villa, Round Lake, Round Lake Beach, Round Lake Heights and Round Lake Park			LC	FL

LC = Lake County
FL = Village of Fox Lake Northwest Regional Water Reclamation Facility
NS = North Shore Water Reclamation District
VL = Village of Libertyville Wastewater Treatment Plant

*Select Areas

Appendix N – Industrial Users (SIU, CU, etc)

2019 Lake County Public Woks Industrial User List

Site Location	Address	City	Category	40 CFR Standard
ALERIS	200 SCHELTER RD	LINCOLNSHIRE, IL 60069	Industrial User	
ANGUS CHEMICAL	1500 LAKE COOK RD	BUFFALO GROVE, IL 60089	Industrial User	
BENDE & SON SALAMI CO	875 CORPORATE WOODS PKWY	VERNON HILLS, IL 60061	Industrial User	
BUFFALO CREEK BREWING LLC	360 HISTORICAL LANE	LONG GROVE IL, 60047	Industrial User	
HYDRAFORCE INC	500 BARCLAY BLVD	LINCOLNSHIRE, IL 60069	Industrial User	
HYDRAFORCE INC	700 WOODLANDS PKWY	VERNON HILLS, IL 60061	Industrial User	
HYDRAFORCE PLANT 2	650 BARCLAY BLVD	LINCOLNSHIRE IL 60069	Industrial User	
KOBELCO	1007 COMMERCE CT	BUFFALO GROVE, IL 60089	Industrial User	
LONG GROVE CONNECTIONARY	333 LEXINGTON DR	BUFFALO GROVE, IL 60089	Industrial User	
OIL DRI	777 FOREST EDGE DR	VERNON HILLS, IL 60061	Industrial User	
PARKER HANFIN	595 SCHELTER RD	LINCOLNSHIRE, IL 60069	Industrial User	
PRECISION RESORUCES	700 HICHORY HILLS DR	VERNON HILLS, IL 60061	Industrial User	
RICHARD WOLF	353 CORPORATE WOODS PKWY	VERNON HILLS, IL 60061	Industrial User	
SCHULTES PRECISION	1250 BUSCH PKWY	BUFFALO GROVE, IL 60089	Industrial User	
SCOTSMAN INDUSTRIES	101 CORPORATE WOODS PKWY	VERNON HILLS, IL 60061	Industrial User	
SEAFOOD MERCHANTS	900 FOREST EDGE DR	VERNON HILLS, IL 60061	Industrial User	
SIEMENS	1000 DEERFIELD PKWY	BUFFALO GROVE, IL 60089	Industrial User	
VAPOR BUS	1010 JOHNSON DR	BUFFALO GROVE, IL 60089	Categorical IU	433
VARIAN MEDICAL	425 BARLCLAY BLVD	LINCOLNSHIRE, IL 60069	Industrial User	
ZF INDUSTRIES	777 HICHORY HILLS DR	VERNON HILLS, IL 60061	Industrial User	