

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA,

and

THE STATE OF ILLINOIS,

Plaintiffs,

v.

CITY OF CAHOKIA HEIGHTS, ILLINOIS,

Defendant.

CONSENT DECREE

**APPENDIX G - Attachment 1
October 2022 CMOM
Part 2**

Appendix F

Sanitary Sewer System Complaint Form

City of Cahokia Heights Water & Sewer Dept.

Report # _____

Sanitary Sewer Problem Reported

(circle)

Person receiving call: _____ Date _____ Time _____ AM PM

Customers Name: _____

Address: _____

Ask the customer the following questions:

1. What is the location of the backup on the property or home? _____
2. Was the washing machine draining before backup started? _____
3. When did the sewer problem start? _____
4. Have you previously reported this same problem? _____ (if yes) Who did you report it to and when did you report it? _____
5. Is there backup in the basement? _____ (if yes) about how much water? _____
6. Is the water clear? _____

Weather Conditions:	☐ Clear	☐ Cont. Rainfall	☐ Widespread Flooding
☐ Groundwater Infiltration	☐ Snow Melt	☐ Storms	
Complaint Results:	☐ Cust. Problem	☐ Broken Sewer	☐ Equipment Failure
☐ Other (explain below)	☐ Power Outage	☐ Blocked Line	

Person Responding to work order: _____

Action Taken: _____

Date and Time Resolved

Date:

Time

If sewage overflow occurs, this problem must be reported to the IEPA within 24 hours of the occurrence!

Contact: **Wayne Caughman** Tel: (618) 346-5125 Fax: (618) 346-5155
Mail: Bureau of Water/Compliance Assurance Section – MC #19
1021 North Grand Ave. East P.O. Box 19276
Springfield, IL 62794-9276
Reported to Bureau: DATE: _____ TIME: _____

(If no contact is made, you must leave voice mail and fax report)

Type of Contact: Agents Name _____

Put a copy of work order in the customers file and in report binder. (Clerks Int.) _____

Appendix G

Sanitary Sewer System Overflow or Bypass Notification Summary Report



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

- 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 bypasses. 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 H

System, Backwater Valve, and Sump Pump Information

A Member of the International Code Family



INTERNATIONAL PLUMBING CODE

2003

CHAPTER 1 ADMINISTRATION

SECTION 101 GENERAL

101.1 Title. These regulations shall be known as the *International Plumbing Code* of [NAME OF JURISDICTION] hereinafter referred to as "this code."

101.2 Scope. The provisions of this code shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within this jurisdiction. This code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel gas-fired water heaters and water heater venting systems shall be regulated by the *International Fuel Gas Code*. Provisions in the appendices shall not apply unless specifically adopted.

Exceptions:

1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the *International Residential Code*.
2. Plumbing systems in existing buildings undergoing repair, alteration, or additions, and change of occupancy shall be permitted to comply with the *International Existing Building Code*.

101.3 Intent. The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of plumbing equipment and systems.

101.4 Severability. If any section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

SECTION 102 APPLICABILITY

102.1 General. The provisions of this code shall apply to all matters affecting or relating to structures, as set forth in Section 101. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

102.2 Existing installations. Plumbing systems lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property is created by such plumbing system.

102.3 Maintenance. All plumbing systems, materials and appurtenances, both existing and new, and all parts thereof, shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition. All devices

or safeguards required by this code shall be maintained in compliance with the code edition under which they were installed.

The owner or the owner's designated agent shall be responsible for maintenance of plumbing systems. To determine compliance with this provision, the code official shall have the authority to require any plumbing system to be reinspected.

[EB] 102.4 Additions, alterations or repairs. Additions, alterations, renovations or repairs to any plumbing system shall conform to that required for a new plumbing system without requiring the existing plumbing system to comply with all the requirements of this code. Additions, alterations or repairs shall not cause an existing system to become unsafe, insanitary or overloaded.

Minor additions, alterations, renovations and repairs to existing plumbing systems shall be permitted in the same manner and arrangement as in the existing system, provided that such repairs or replacement are not hazardous and are approved.

[EB] 102.5 Change in occupancy. It shall be unlawful to make any change in the occupancy of any structure that will subject the structure to any special provision of this code without approval of the code official. The code official shall certify that such structure meets the intent of the provisions of law governing building construction for the proposed new occupancy and that such change of occupancy does not result in any hazard to the public health, safety or welfare.

[EB] 102.6 Historic buildings. The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures are judged by the code official to be safe and in the public interest of health, safety and welfare regarding any proposed construction, alteration, repair, enlargement, restoration, relocation or moving of buildings.

102.7 Moved buildings. Except as determined by Section 102.2, plumbing systems that are a part of buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new installations.

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 13 and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where the differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements.

102.9 Requirements not covered by code. Any requirements necessary for the strength, stability or proper operation of an existing or proposed plumbing system, or for the public safety, health and general welfare, not specifically covered by this code shall be determined by the code official.

(k_v), in accordance with the manufacturer's specifications and as modified for aging roughness factors with deposits and corrosion.

TABLE 713.11.3
STACK SIZES FOR PRESSURE STERILIZERS
 (Number of Connections of Various Sizes Permitted
 To Various-sized Vent Stacks)

STACK SIZE (inches)	CONNECTION SIZE			
	3/4"	1"	1 1/4"	1 1/2"
1 1/2" ^a	3 or	2 or	1	—
1 1/2" ^b	2 and	1	—	—
2"	6 or	3 or	2 or	1
2" ^b	3 and	2	—	—
2" ^b	2 and	1 and	1	—
2" ^b	1 and	1 and	—	1
3"	15 or	7 or	5 or	3
3" ^b	1 and	1 and 5 and	2 and —	2 1

For SI: 1 inch = 25.4 mm.

a. Total of each size.

b. Combination of sizes.

714.3.2 Slope of horizontal drainage piping. Horizontal drainage piping shall be designed and installed at slopes in accordance with Table 704.1.

SECTION 715 **BACKWATER VALVES**

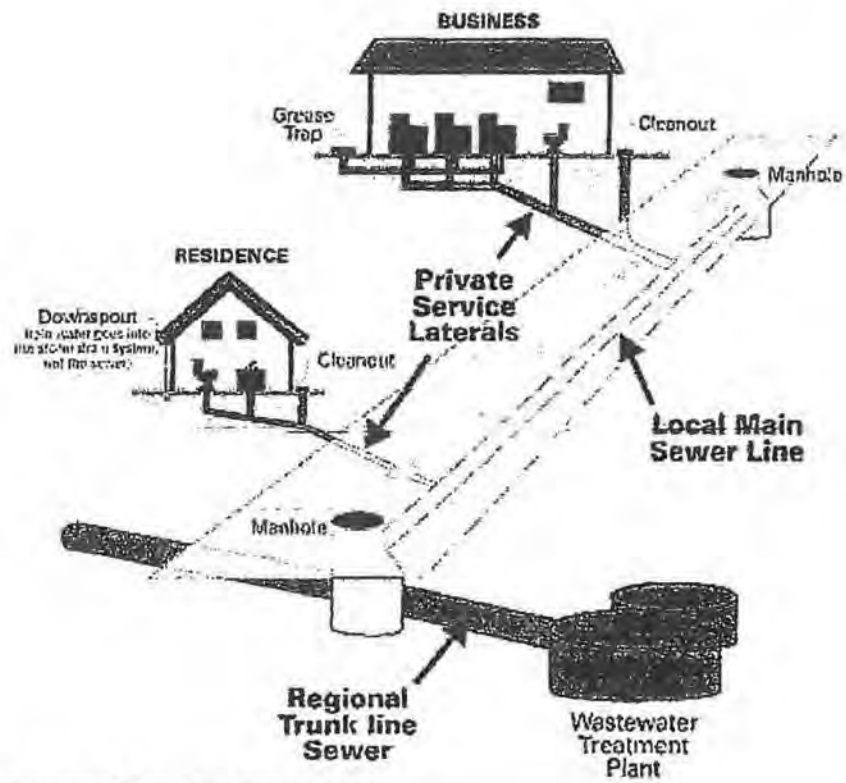
715.1 Sewage backflow. Where the flood level rims of plumbing fixtures are below the elevation of the manhole cover of the next upstream manhole in the public sewer, such fixtures shall be protected by a backwater valve installed in the building drain, branch of the building drain or horizontal branch serving such fixtures. Plumbing fixtures having flood level rims above the elevation of the manhole cover of the next upstream manhole in the public sewer shall not discharge through a backwater valve.

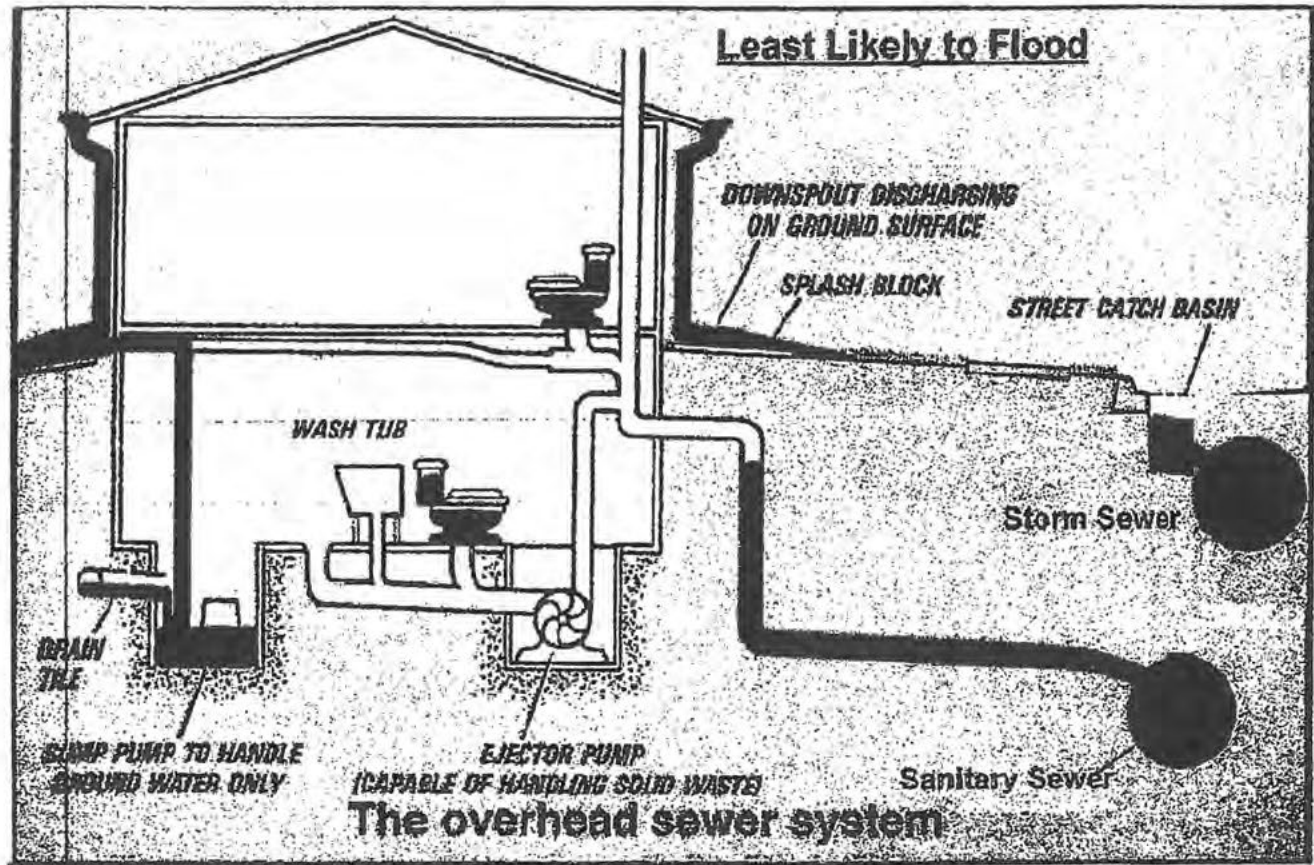
715.2 Material. All bearing parts of backwater valves shall be of corrosion-resistant material. Backwater valves shall comply with ASME A112.14.1, CSA B181.1 or CSA B181.2.

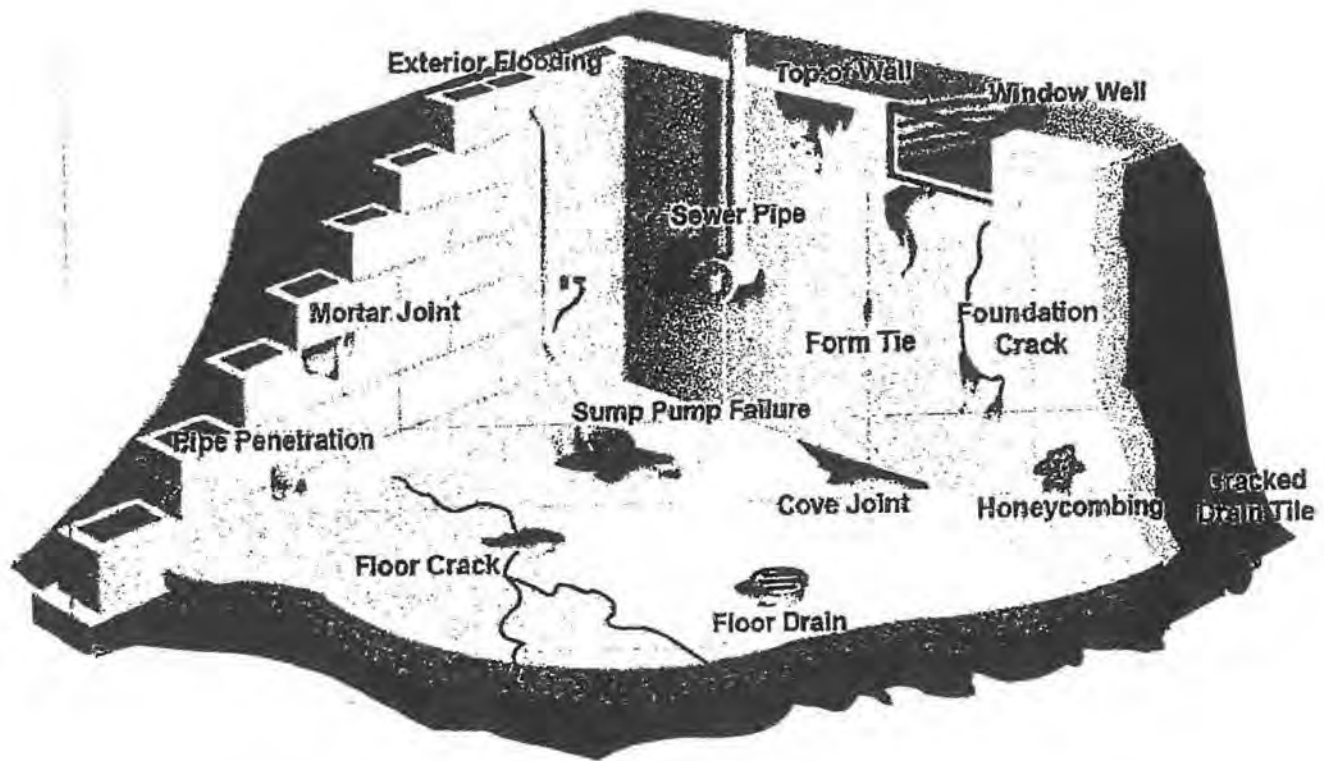
715.3 Seal. Backwater valves shall be so constructed as to provide a mechanical seal against backflow.

715.4 Diameter. Backwater valves, when fully opened, shall have a capacity not less than that of the pipes in which they are installed.

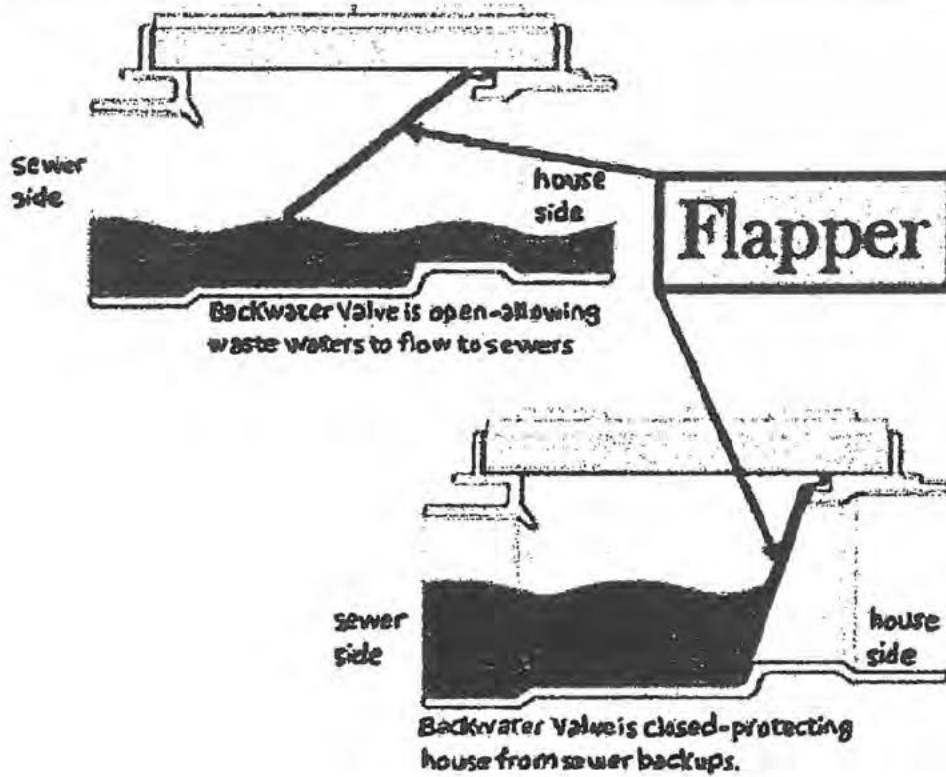
715.5 Location. Backwater valves shall be installed so that access is provided to the working parts for service and repair.







How a Backwater Valve Works



Appendix I

Safety and Training Information



City of Cahokia Heights Water & Sewer Department

On the job Safety practices:

On a daily basis, employees report to the streets to maintain our critical infrastructure. In the course of doing their jobs, they contend with a variety of traffic risks, biohazards, hazards within confined spaces, and the dangers of excavating and trenching. Safety protocols have been established to protect these employees and customers in our City.

TRAFFIC SAFETY PROCEDURES FOR WASTEWATER EMPLOYEES

In order to protect workers and the public, the following steps should always be taken before beginning sewer work:

- Determine the best traffic control methods based on federal, state and municipal guidelines.
- Submit a traffic control plan to the appropriate agency (local DOT, street department).
- Set up traffic control devices before parking vehicles or unloading equipment.
- Work with local businesses and residents to maintain access.
- Ensure that each worksite has essentials such as signage, flags, high-visibility clothing and barriers to ensure safety for workers and pedestrians.

SSO Safety Procedures

RESPONDING STAFF RESPONSIBILITIES

The first crew responding to a sewer backup has the immediate responsibility to protect people, property, and the environment from effects of a sewage spill/overflow. To meet these objectives in a rapid, effective and organized manner, staff will respond and fulfill the duties in the following categories as directed by this plan:

#1 CONTAIN spilling sewage from entering waterways

- Capture the sewage where it can be recovered and returned to the sewer system.
- Contain sewage in advantageous locations (i.e. flood control facilities, construction

excavations locations, vacant lots etc.)

- Containment materials include sand, sand bags, poly sheeting, socks, etc.

#2 CONTROL the spill overflow and bypass area of failure

- Bypass the obstructed line by pumping the spillage into another non-restricted line or vacuum with VacCon truck
- Set up barricades to prevent public contact with spill

#3 CLEANUP the affected areas to ensure public health and safety

- Remove all visible debris
- Wash down and contain run-off being careful not to wash sewage into storm drain system
- Determine whether to disinfect or not to disinfect?
- Consider the uses and ownership of affected properties
- Clean all hard/soft surfaces

PERSONAL PROTECTIVE EQUIPMENT

Wearing personal protective equipment (PPE) is a proactive way to guard against any harmful biohazards a sewer worker may come into contact with. The most significant step a wastewater worker can take towards protecting their health is to use adequate PPE. The better your PPE, the less likely you are to contract a disease or infection from sewage. Recommended items for working around sewers are:

- Gloves. Keep bacteria and viruses off skin, and protect from abrasions which are highly susceptible to infection.
- Boots. Protect feet and lower legs from contact with biohazards, and keep them at work to prevent the spread of dangerous bacteria to homes.
- Safety Glasses or Face Shield. Protect eyes from contact with biohazards via splashes and sprays.
- Respirator. Filter out airborne toxins, as well as splashes and sprays.
- Protect the body and clothing from contact with biohazards.
- Gloves. Keep bacteria and viruses off skin, and protect from abrasions which are highly susceptible to infection.

While this equipment helps protect sewer workers from exposure to biohazards, it can only be effective when used properly and consistently.

Clean Your Equipment

It is important to make sure the sewer equipment that's used every day is kept clean and sanitary. This can be done by:

- Wiping the cable and hoses with an antibacterial solution when retracting them.

- Cleaning the cameras, crawlers and nozzles with an antibacterial solution.
- Sanitizing door handles, controls, keyboards/mice and work surfaces.

Practice Safe Hygiene

At the end of the day, there is a simple list of do's and don'ts that can keep you safer and healthier:

- Wash hands thoroughly and frequently before eating, drinking and smoking
- Wash hands before and after using the bathroom and contacting contaminants
- Wear PPE
- Use barriers between skin and sewer surfaces
- Use gloves to prevent skin abrasions
- Keep wounds covered with clean, dry bandages
- Thoroughly flush eyes with water if in contact with contaminants
- Change into clean work clothing daily
- Sanitize or change footwear before leaving work and before entering vehicles or buildings
- Clean equipment
- Eat in designated areas away from biohazards
- Avoid inhalation of infectious agents and aerosols
- Always wear a respirator

And don't:

- Touch any part of your face, genitalia, open sores or cuts while working
- Smoke or chew tobacco or gum while working
- Wear work clothes at home or outside the work environment
- Handle equipment without gloves

Confined space:

Is large enough for a worker to enter and perform the assigned tasks.

- Is not designed for continuous occupancy.
- Has a limited means of entry or exit.

There are three primary categories for confined space hazards:

- **Atmosphere.** A hazardous atmosphere is depleted of oxygen or contains toxic gases like hydrogen sulfide, or flammable gases like methane.

- **Engulfment.** Engulfment occurs when a substance such as water or sand overwhelms workers, suffocating or crushing them.
- **Trapping.** Trapping occurs when the configuration in a confined space prevents workers from leaving the space safely.

All of these hazards can be controlled and avoided through proper procedure and personal protective equipment

PREVENTATIVE MEASURES BEFORE ENTERING A CONFINED SPACE:

Sometimes entering a confined space is unavoidable. During those times there are a few things you can do to ensure your safety.

NEVER ENTER UNATTENDED

Remember, never enter a confined space alone. It's always necessary to station an attendant above ground to observe the operation. In the event of an emergency, an attendant can be the difference between life and death for a sewer worker in a confined space. Be sure that the attendant is equally informed about confined space hazards so they are aware of what specific hazards to monitor for, as well as what the evacuation procedure is.

USE THE RIGHT EQUIPMENT

In addition to standard personal protective equipment (PPE) such as: face/eye protection, hard hats, steel-toed boots and gloves, be sure to use:

- Ventilator fans and ducts. Ensures you have a steady air supply and minimizes exposure to potentially harmful gases.
- A winch and harness. Ensures that you enter and exit the confined space safely. In the event of an emergency, it enables the attendant to assist in removal.

- Communication - Maintain contact between the attendant and the worker within the confined space, allowing them to alert each other about hazards.
- Gas monitor, Monitors the air quality in a confined space. Remember, denser gases sink, so it is necessary to ensure the gas concentrations are within safe levels before entering the confined space and continue to monitor levels throughout to ensure safety

BEWARE OF ENGULFMENT

Workers should never enter deteriorated structures or cavities with high flow or loose soil, as these have a higher risk of engulfment.

TRY TO AVOID CONFINED SPACE ENTRY

Confined spaces always present risks for sewer workers and the only way to truly avoid these risks is to avoid entering a confined space whenever possible. Before entering a confined space it's first necessary to perform a complete assessment of all hazards. Be sure to review the proper evacuation procedure and check that the necessary equipment is present and ready for use. Also, it is vital that anyone that enters a confined space has been trained on proper protocol.

In order to minimize personal endangerment, consider conducting your sewer inspection with video sewer inspection equipment. A manhole inspection camera, CCTV sewer inspection crawler, video nozzle and zoom camera provides sewer workers with everything they need to quickly and efficiently complete a sewer inspection without exposing themselves to potentially lethal atmosphere hazards and risks like engulfment and entrapment.

SAFETY PRECAUTIONS SEWER WORKERS SHOULD TAKE WHEN EXCAVATING AND TRENCHING:

The U.S. Department of Labor's Occupational Safety and Health Administration ([OSHA](#)) [reports](#) that, "Excavating is recognized as one of the most hazardous construction activities," and trench collapse is the primary danger. The consequences of improper trenching and excavation work can be fatal. The

environmental, health and safety magazine EHS Today reports that two excavation and trench workers are killed every month, “a fatality rate that is 112% higher than the rate for general construction.”

Pump Station Safety:

Pump maintenance is an ongoing and important facet of owning and operating a pump station. This means that at some point it is likely the pump will have to be lifted from the wet well for maintenance. Although this is a common activity that occurs regularly in most maintenance departments, pulling pumps can pose a safety risk if the best practices are not followed.

- Use reliable fall protection in the form of safety harness.
- Practice safe hygiene and sanitary protection
- Practice safe lifting , use, winches, lifting hoists, and “come-alongs” as options to prevent hand lifting pumps from a well.
- Wear gloves and eye protection
- Clean the area after reomoval of pump or maintenance is completed
- Secure the area of the pump station – making sure all gates and/ or fences are locked



Safety Council of Greater St. Louis

2330 Hampton Avenue
St. Louis, Missouri 63139
Phone: (314) 621-9200
Fax: (314) 621-9204
www.stlsafety.org

March 23, 2022

Sharlin K. Pfeffer
Asst. Director
Water & Sewer
City of Cahokia Heights

Dear Sharlin,

Enclosed please find the certificates of completion for the Confined Space, Lock-Out/Tag-Out, and Trenching Awareness classes held on March 11th.

We enjoyed working with your team and thank you for choosing the Safety Council of Greater St. Louis to assist with your team training.

Kind Regards,

Mary Beth Proost
Executive Director
Safety Council of Greater St. Louis
Cell: 314-808-7732

Enc: yes

ncv
6-13-22

A Non-Profit 501 (c)(3), Non-Governmental, Public Service Organization



COURSE TITLE		LOCATION	DATE/TIME	INSTRUCTOR
Confined Spaces Lock-Out/Tag-Out Trenching		2525 Moosette Lane, Cahokia, IL	March 11, 2022 8:30 a.m. - 12:00 p.m.	Frank Phillips
	LAST NAME	FIRST NAME	Company	Signature
1	[REDACTED]	Sean	Commonfield	
2	[REDACTED]	Nicholas	Commonfield	
3	[REDACTED]	LEO	Commonfield	
4	[REDACTED]	Joshua	Commonfield	
5	[REDACTED]	Travanti	Commonfield	
6	[REDACTED]	Tason	Commonfield	
7	[REDACTED]	Patrick	Commonfield	
8				
9				
10				

EXAMPLE



The Safety Council of Greater St. Louis

Nicholas [REDACTED]

has successfully completed

**Trenching/Shoring and Flagger Awareness,
Lock Out/Tag Out, Confined Space Training
PERMIT REQUIRED CONFINED SPACE ENTRY
29 CFR 1910.146**

Location: 2525 Moosette Lane
Cahokia, IL 62206

Date: March 11, 2022
8:30 AM-12:00 PM

CEUs: .4

Franklin A. Phillips
Franklin A. Phillips
Confined Space Instructor
Certified Environmental Trainer
Certified Hazardous Materials Manager

TRAINED OPERATOR LICENSE

Class 5

This confirms that



Has completed the Forklift Safety Training class offered by the Industrial Technology Department of

SOUTHWESTERN ILLINOIS COLLEGE

Valid for 3 yrs.

Date: 3/21/11 at SWIC (CCC) Instructor: Gary Gruenert



AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION



This is to affirm that

has satisfied the requirements to be designated as a REGISTERED FLAGGER

Expiration Date: 8-25-14 Issued in: IL

Verification available by calling 1-877-642-4637 or at <http://www.flagger.com>

OSHA

700595237



U.S. Department of Labor
Occupational Safety and Health Administration

has successfully completed a 10-hour Occupational Safety and Health Training Course in

General Industry Safety & Health

(Trainer)

(Date)

Painters District Council #58
Joint Apprenticeship & Training Fund

This is to certify that [redacted] has successfully completed the Scaffolding User Course at the District Council #58 Training Facility on March 28, 2018. This course is based on the 1926 Subpart I, Scaffolding Standard.

This card expires (3) three years from date of completion.

OSHA

Occupational Safety and Health Administration

15-60058208

This card acknowledges that the recipient has successfully completed a 30-hour Occupational Safety and Health Training Course in Construction Safety and Health

(Trainer name - print or type)

1/28/12

(Course end date)

Painters District Council #58
Joint Apprenticeship & Training Fund

This is to certify that [redacted] has successfully completed IUPAT Boom/Scissor Lift Awareness Training at the District Council 58 Training Facility on June 4, 2018.

This card expires (4) four years from date of completion.

OSHA

Occupational Safety and Health Administration

20-00352003

This card acknowledges that the recipient has successfully completed a 10-hour Occupational Safety and Health Training Course in Construction Safety and Health

(Trainer name - print or type)

02/22/2011

(Course end date)

Painters District Council #58
Joint Apprenticeship & Training Fund

This is to certify that [redacted] has successfully completed IUPAT Boom/Scissor Lift Awareness Training at the District Council 58 Training Facility on March 28, 2018.

This card expires (4) four years from date of completion.

Appendix J

Emergency Response Plan

**CITY OF CAHOKIA HEIGHTS
WATER AND SEWER
DEPARTMENT EMERGENCY
RESPONSE PLAN 2022**

EMERGENCY RESPONSE PLAN

City of Cahokia Heights

Water and Sewer Department

2525 Mousette Lane

Cahokia Heights, Illinois 62206

(618) 332-1222

Municipal Operating #1635000

Copies of this Document will be located at addresses below:

Water and Sewer Office: 2525 Mousette Lane/ Cahokia Heights, IL 62206 / (618) 332-1222

City Hall (Mayor/Clerk) Office: 103 Main Street / Cahokia Heights, IL 62206 / (618) 337-9510

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- 7.1 Wells
- 7.2 Water Treatment Plants

Section 8.0 Power and Mechanical Failures

- 8.1 Electrical Failures
- 8.2 Mechanical Failures
- 8.3 Distribution System Failures

Section 9.0 Boil Water Order Procedures

- 9.1 Distribution System Contamination Procedure
 - 9.1.1 Issuing Boil Water Order
 - 9.1.2 Lifting Boil Water Order
 - 9.1.3 Boil Order Notice

Section 10.0 Employee Training

Section 11.0 Plans, Actions and Procedures

Emergency Response Plan
Date Updated 12/31/2021

INTRODUCTION

To aid in continuing the water system's mission of providing safe water of adequate quantity to meet the needs of our customers, this ERP contains the required four elements outlined in the AWIA. Specifically, this plan contains:

- Strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;
- Plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;
- Actions, procedures and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes and construction of flood protection barriers; and
- Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

To accomplish this planning and documentation process, the attributes of the water supply have been systematically analyzed leading to the development of a comprehensive plan. The elements included: system specific information; chain of command; notification information; communication procedures; alternate water source; local emergency planning; coordination; safety and sample collection; and plans, actions and procedures.

The ERP is divided into two sections. The first section is intended to be used for responding to any emergency and describes basic plans and procedures unique to the utility. The second section contains specific scenarios that are created based on the threats, mission and critical equipment that were identified in the RRA as well as other emergencies such as specific natural disasters (e.g., flood, hurricane, tornado, etc.). These individual action plans are intended to be 'rip and run' type documents that can be used in the field during an emergency.

Section 1.0 Emergency Contacts

1.1 Elected and Appointed Officials

*Mayor

Curtis McCall, Sr.
4004 Pocket Road
Cahokia Heights, IL 62206
618-520-3533
618-337-9505 Dispatch

City Alderman

James Haywood
119 St. Barbara Drive
Cahokia Heights, IL 62206
618-337-9500 Work
618-381-2009 Cell

City Alderman

FDemario Weedon
832 St. Benedict Dr.
Cahokia Heights, IL 62206
618-337-9500 Work
618-223-0255 Cell

City Alderman

Gloria Ware
1987 Oak Tree Lane
Cahokia Heights, IL 62206
618-337-9500 Work
618-381-2403 Cell

Chief of Police

Steven Brwon
1723 Theodore Lane
Cahokia Heights, IL 62206
618-806-1230 Cell
618-332-1184 Work

Emergency Disaster Services

Coordinator - Marcus Jackson
4922 Tudor Avenue
Cahokia Heights, IL 62207
618-791-4487 Cel

City Clerk

Richard Duncan
605 Wright Avenue
Cahokia Heights, IL 62206
618-332-4256 Work
618-207-9463 Cell

City Alderman

Tiffany Pearce
2317 Carol St.
Cahokia Heights, IL 62206
618-337-9500 Work
618-381-2403 Cell

City Alderman

Lisa Van Meter
2717 Camp Jackson Rd.
Cahokia Heights, IL 62206
618-337-9500 Work
618-623-9501 Cell

Clinton Lovett

5620 Gay Ave.
Cahokia Heights, IL 62206
618-337-9500 Work
618-722-6020 Cell

Fire Chief

Stephen Robbins
1400 Doris Avenue
Cahokia Heights, IL 62206
618-337-9505 Dispatch
618-337-5080 Fire House
618-531-3931 Cell

*Operator/Director Water & Sewer

Dennis Traituer
2364 Carol St.
Cahokia Heights, IL 62206
618-580-5271 Cell

*Assistant Director of Water & Sewer Department

Sharlin Pfeffer
1849 Marine Rd.
St. Jacob, IL 62281
618-515-2376 Work
618-580-5271 Cell

*Authorized to Issue and Lift Boil Water Orders
Secure Materials, Supplies, and Services in Potential Emergencies

1.2 Water and Sewer Office Personnel

Administration:

*Assistant Director of Water & Sewer Department

Sharlin Pfeffer

618-515-2376 Work

618-580-5271 Cell

Field Director of Water & Sewer

Van McCall

618-332-1222 Work

618-444-1356 Cell

Office Personnel:

Sheree Franklin

Amber Crum

618-332-1222 Work

618-337-9519 Fax

Jeanetta Perkins

Peggy Pierce

Lakeshia White

1.3 Water and Sewer Field Operations Personnel:

*Director/Operator:

Dennis Traiteur

618-332-1222 Work

618-410-7808 Cell

Field Director

Van McCall

3900 Pocket Rd.

Cahokia Heights, IL 62206

618-444-1356 Cell

Electrician(s):

Al Carter

107 Walnut Street

Cahokia Heights, IL

62206 618-604-6685 Cell

Field Director

Jason McMath

806 Joliet

Cahokia Heights, IL 62206

Leadman:

James Culpepper

618-332-1222 Work

Patrick Belk

Curtis Belt

Roy Belt

Tyrone

Crawford

Nicholas Gale

Travanti Hill

Eric Jackson

Sammy

Richardson

Leo Brown

Greg Radford

Sean Sayles

Joshua Ware

Torondo Williams

Patrick Thompson

1.4 Illinois EPA Regional Office

Regional Manager - Gayle Renth

Staff Personnel - Regan Taylor, James Blessman

1101 Eastport Plaza Drive, Suite 100

Collinsville, IL 62234

618-346-5120 Office

618-346-5155 Fax

1.5 Illinois Emergency Management Agency (IEMA)

800-782-7860 24 Hour Toll Free

1.6 National Response Center

800-424-8802 24 Hour Toll Free

1.7 Chemtrec
800-424-9300 24 Hour Toll Free

- 1.8 Emergency Management Agency
St. Clair County EMA
Director, Herbert Simmons
110 W. Washington Street
Belleville, IL 62220
618-825-2683 Office
618-825-2750 Fax
- 1.9 County Health Department
St. Clair County Health Department
Executive Director, Myla Blandford
#19 Public Square, Suite 150
Belleville, IL 62220
618-233-7703 Office
618-233-7713 Fax
- 1.10 Illinois Rural Water Association
Executive Director, Frank Dunmire
3305 Kennedy Road, PO Box 49
Taylorville, IL 62568
217-287-2115 Office
217-824-8638 Fax
- 1.11 Local Township
Centreville Township
Supervisor, Curtis McCall, Sr.
4831 Bond Avenue
Cahokia Heights, IL 62207
618-874-1034 Office
618-875-4190 Fax
- 1.12 County Highway Department
St. Clair County Highway Department
County Engineer, Norm Etling
1415 N. Belt West
Belleville, IL 62223
618-233-1392 Office
618-233-0996 Fax
- 1.13 Illinois State Police District 11 Office
District Commander, Brad Parsons
1100 Eastport Plaza Drive
Collinsville, IL 62234-6116
618-346-3990 Office
Trooper First Class, Buddy Dye
618-346-3602 Office
- 1.14 Federal Bureau of Investigations
FBI Springfield, SAC, David G. Nanz
900 E. Linton Avenue
Springfield, IL 62703
217-522-9675 Office
217-757-3558 Fax
FBI Chicago
2111 W. Roosevelt Road
Chicago, IL 60608
312-421-6700 Office

Section 2.0 Local Notification

2.1 Police Department
City of Cahokia Heights Police Department
5800 Bond Avenue
Cahokia Heights, IL 62206
618-337-9505 Dispatch
911 Emergencies

2.2 Fire Department
City of Cahokia Heights Fire Department
1400 Doris Avenue
Cahokia Heights, IL 62206
618-337-5080 Fire House
911 Emergencies

2.3 Emergency Service and Disaster Agency
City of Cahokia Heights ESDA
Coordinator Marcus Jackson
4922 Tudor Ave.
Cahokia Heights, IL 62207
618-337-9500 Work
618-791-4487 Cell

2.4 County Sherriff's Department
St. Clair County Sheriff's Department
Sheriff, Richard Watson
700 N. 5th Street
Belleville, IL 62220
618-277-3505 Non-Emergencies
911 Emergencies

2.5 Media Outlets

2.5.1 Newspaper

Belleville News-Democrat
#23 Public Square, 2nd Floor
Belleville, IL 62220
618-234-1000 Main Office
618-234-9597 Fax

2.5.2 Radio Stations

KMOX, 1120 AM
Beth Coghlan, News Director
1220 Olive Street, 3rd Floor
St. Louis, MO 63103
314-621-2345 Main Office
314-588-1239 Fax

WIL, 92.3 FM
Tommy Mattern, Program Director
11647 Olive Boulevard
St. Louis, MO 63141
314-983-6000 Main Office
314-994-9447 Fax

2.5.3 Television

KTVI, FOX 2 News
Audrey Prywitch, News Director
2250 Ball Drive
St. Louis, MO 63146
314-213-7831 Main Office
314-213-7440 Fax
ktvinews@tvstl.com Email

KSDK, Channel 5 News
Art Holliday, News Director
1000 Market Street
St Louis, MO 63101
314-421-5055 Main Office
314-425-5348 Fax
kmovesian@ksdk.com Email

KMOV, Channel 4 News
Scott Diener, News Director
1 Memorial Drive
St Louis, MO 63102
314-444-6333 Main Office
314-621-4775 Fax
kmovwebsite@kmov.com Email

KETC, Channel 9 News
Chrys Marlow, VP of Engineering
3655 Olive Street
St Louis, MO 63108
314-512-9000 Main Office
314-512-9005 Fax
contactus@ninepbs.org Email

2.6 Healthcare Organizations

2.6.1 Hospitals

Memorial Hospital
Director of EMS, Phil Pugh
4500 Memorial Drive
Belleville, IL 62226
618-233-7750 Office
618-257-6791 Fax

St. Elizabeth Hospital
Tim Claxton
211 S. 3rd Street
Belleville, IL 62220
618-234-2120 ext. 2808
618-222-4624 Fax

Touchette Hospital
Sam Kinman
5900 Bond Avenue
Centreville, IL 62207
618-332-3060 ext. 5347
618-332-5256 Fax

2.6.2 Clinics

East Side Health District
Elizabeth Patton-Whiteside
650 N 20th Street
East Saint Louis, IL 62205
618-271-8722 ext. 100
618-875-5038

Cahokia SIHF Healthcare
Lynn Shelton, Coordinator
800 Range Lane
Cahokia Heights, IL 62206
618-337-3117 Office
618-874-4713 Office

Section 3.0 Inventory Information

3.1 Mapping and Drawings of Distribution System:

City of Cahokia Heights
Water and Sewer Department Office
2525 Mousette Lane
Cahokia Heights, IL 62206
618-332-1222 Office

618-337-9519 Fax

Hurst-Rosche, Engineering Firm
Terry Sudholdt, Engineer
5 Bank Square
East Saint Louis, IL 62203

618-398-0890 Office

3.2 Materials and Chemical Inventory

City of Cahokia Heights Water & Sewer Field Shop/Garage
2525 Mousette Lane
Cahokia Heights, IL 62206

3.3 Tools and Equipment

City of Cahokia Heights Water & Sewer Field Shop/Garage
2525 Mousette Lane
Cahokia Heights, IL 62206

Section 4.0 Sources of Supplies and Services

4.1 Contractors of Supplies and Services

4.1.1 Primary Water Source Supplier

Illinois American Water Company - East St. Louis
Rachel Bretz, Director of Water Quality and Compliance
300 N. Water Works Drive
Belleville, IL 62223
618-874-2404 Office 618-779-1555 Office
800-422-2782 After Hours 618-791-5273 24 Hours
618-830-1820 Cell

4.1.2 Well Contractors

D & S Well Drilling, Inc.
1626 Kropp Road
Millstadt, IL 62260
618-476-3382 Office

4.1.3 Plumbing Contractors

Spengler Plumbing Jason Spengler, Owner 1402 Frontage Road O'Fallon, IL 62269 618-632-4433 Office 618-206-0022 Office	Beloman Plumbing Jim Lugge, Owner 5909 Cool Sports Road Belleville, IL 62223 618-235-6626 Office 618-398-9484 After Hours	Ehret Plumbing 111 Premier Drive Belleville, IL 62220 618-233-1018 Office
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4.1.4 Excavation & Mechanical Contractors

Baxmeyer Construction David Baxmeyer 1034 Floraville Road Waterloo, IL 62298 618-939-3000 Office 618-939-4299 Fax	Hank's Excavating & Landscaping, Inc. Henry Rohwedder, President 5825 W State Rte. 161 Belleville, IL 62223 618-398-5556 Office 618-398-5056 After Hours 618-398-2729 Fax
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4.1.5 Parts and Equipment Suppliers

Core & Main (Branch 420)
Steve Anderson, Account Representative
45 Northgate Industrial Drive
Granite City, IL 62040
618-452-3353 Office
618-791-5580 Cell
618-452-3189 Fax

Schulte Supply
John Schulte, President
5998 Redbud Lane
Edwardsville, IL 62025
800-843-3711 Office
618-973-4729 Cell
618-656-8750 Fax

Midwest Municipal Supply
Tony Barbarotto
40 Tucker Drive
Caseyville, IL 62232
618-344-1040 Office
618-344-2176 Fax

Thrifty Hardware
Daniel Bertelsen
22 Jerome Lane
Cahokia Heights, IL 62206
618-337-4286 Office
618-660-9513 Cell

Hertz Equipment Rental (Here Rentals)
Tracy Colvin, Senior Coordinator
3030 Market Street
St Louis, MO 63103
314-534-8300 Office

United Rental
Nathan Osterholt
5076 Mid America Court
Collinsville, IL 62234
618-345-6050 Office
217-206-5523 Cell
618-345-0723 Fax

4.1.6 Mutual Aid

Illinois American Water Company - East St. Louis
Rachel Bretz, Director of Water Quality and Compliance
300 N. Water Works Drive
Belleville, IL 62223
618-874-2404 Office
800-422-2782 After Hours
618-830-1820 Cell

618-779-1555 Office
618-791-5273 24 Hours

4.1.7 Water Testing Laboratory

Teklab
John Riley
5445 Horseshoe Lake Road
Collinsville, IL 62234
618-344-1004 Office/After Hours
618-920-1844 Cell
618-344-1005 Fax

4.1.8 Electrical Contractors

Lowry Electric
Gary Bland
926 McDonough Lake Road
Collinsville, IL 62234
618-343-4200 ext 116 Office
618-779-2784 Cell
618-343-4201 Fax
gbland@lowryelect.com Email

J.F. Electric
Josh Baker
100 Lakefront Parkway
Edwardsville, IL 62025
618-797-5353 Office
618-797-5354 Fax

Glaenzer Electric
Larry Glaenzer, Owner
10 Empire Drive
Belleville, IL 62220
618-277-2500 Office
618-277-2711 Fax

4.1.9 Electrical Utilities

Ameren
P.O. Box 511
Decatur, IL 62525
800-755-5000 Office
217-425-4161 Fax

800-232-2477 Office
877-263-7369 Fax

4.1.10 Gas Utilities

Ameren
P.O. Box 511
Decatur, IL 62525
800-755-5000 Office
217-425-4161 Fax

4.1.11 Telephone - Emergency Robo Calls

Call One
P.O. Box 87618, Dept. 10278
Chicago, IL 60680-0618
800-440-9440 Customer Service
312-Call-One Locally in Illinois

4.1.12 Utilities/Locating

J.U.L.I.E.
3275 Executive Drive
Joliet, IL 60431
800-892-0123 Locate Request
815-741-5000 Office/Admin
815-741-5597 Fax

4.1.13 Consulting Engineers

Hurst-Rosche Engineering Firm
Terry Sudholdt, Engineer
5 Bank Square
East Saint Louis, IL 62203
618-398-0890 Office

Section 5.0 Major and Sensitive Customers

5.1 Healthcare

Cahokia SIHF Healthcare
Lynn Shelton, Coordinator
800 Range Lane
Cahokia Heights, IL 62206
618-337-3117 Office
618-874-4713 Office

Atrium Healthcare and Rehabilitation
Stephanie Birch, Director
3354 Jerome Lane
Cahokia Heights, IL 62206
618-337-9823 Office
618-337-9400 Office
618-332-1811 Fax

Cahokia High School (CUSD #187)
Valeska Hill, Head Principal
800 Range Lane
Cahokia Heights, IL 62206
618-332-3730 Office
618-332-3747 Fax

7th Grade Academy (CUSD #187)
Terence Tate, Principal
1900 Mousette Lane
Cahokia Heights, IL 62206
618-332-3722 Office
618-332-3741 Fax

Academic Character Development (CUSD #187)
Phyllis Boyd, Principal
300 Annunciation Court
Cahokia Heights, IL 62206
618-332-5101 Office
618-337-6697 Fax

5.2 Cahokia Nursing and Rehabilitation Center Julia Feldt, Acting Director 2 Annable Court Cahokia Heights, IL 62206 618-332-0114 Office 618-332-1043 Fax

Elizabeth Morris Elementary (CUSD #187) Emma
Cornelius, Principal
1500 Andrews Drive
Cahokia Heights, IL 62206
618-332-3718 Office
618-332-3785 Fax

School

Cahokia School District (CUSD
#187) Arnett Harvey, Superintendent
1700 Jerome Lane
Cahokia Heights, IL 62206
618-332-3700 Office
618-332-3706 Fax

Estelle Sauget School of Choice (CUSD #187) Nathaniel
Porter, Principal
1700 Jerome Lane
Cahokia Heights, IL 62206
618-332-3820 Office
618-332-3824 Fax

8th Grade Academy (CUSD #187)
Jamie Nash-Gray, Principal
1900 Mousette Lane
Cahokia Heights, IL 62206
618-332-3722 Office
618-332-3725 Fax

Oliver Parks 6th Grade (CUSD #187)
Carmen Williams-Bonds, Principal
1900 Mousette Lane
Cahokia Heights, IL 62206
618-332-3796 Office
618-332-3797 Fax

Lalumier Elementary (CUSD #187)
Cynthia Langston, Principal
6702 Bond Avenue
Cahokia Heights, IL 62206
618-332-3713 Office
618-332-3811 Fax

Maplewood Elementary (CUSD #187)
Kristi Schroeder, Principal
600 Jerome Lane
Cahokia Heights, IL 62206
618-332-3709 Office
618-332-3787 Fax

Helen Huffman Elementary (CUSD #187)
Melissa Rebmann, Principal
600 St. Robert Drive
Cahokia Heights, IL 62206
618-332-3720 Office
618-332-3782 Fax

Penniman Elementary (CUSD #187)
Tamara Taylor, Principal
1820 Jerome Lane
Cahokia Heights, IL 62206
618-332-1915 Office
618-332-1918 Fax

5.3 Commercial/Industrial

Jarrot Mansion, 124 East 1st Street
Holy Family Rectory, 116 East 1st Street
Fitness & Youth Center, 200 West 3rd Street
Ed Meyers, 99 Water Street
Illinois Historic Preservation, 107 Elm Street
Cahokia Fire House, 103 Main Street
Cahokia Street Sweeper Meter, 600 Levin Drive
Floyd's Towing, 300 Water Street
Cahokia Club, 500 Water Street
Randy Fischer, Jr., 103 Water Street
Trail's End Motel, 600 Water Street
AM Bottoms Regional WW, 600 Levin Drive
Cahokia Liquor, 527 Illinois 3
MBD Auto Repair, 532 Illinois 3
K.C. Hall, 100 East 5th Street (Church Street)
V.F.W. Post 1699, 621 Water Street
Eric Berla (Dentistry), 400 Water Street
Emeth Lodge, 815 Water Street
Holy Family Gymnasium, 116 East 1st Street
New Destiny Ministries, 535 Illinois 3
E.S.D.A. Building, 200 West 1st Street
Cahokia High School, 800 Rage Lane
7th Grade Academy, 1900 Mousette Lane
Academic Character, 300 Annunciation Court
Elizabeth Morris Elementary, 1700 Jerome Lane
Maplewood Elementary, 600 Jerome Lane
Necco Stop and Shine, 2207 Camp Jackson Road
John Holzum, 601 Water Street
Carl Baumann, 1663 Camp Jackson Road
East Side Health District, 1274 Camp Jackson Road
Savannah Motors, 1723 Sonny Lane
Christian Bingesser, 532 Illinois 3
Cahokia Water & Sewer, 2525 Mousette Lane
Kings Beauty Supply, 1645 Camp Jackson Road
Ed Myers, 724 Cooper Drive
Derek L. Wise, 520 Range Lane
AT&T, 1000 Mildred Avenue
St. Louis Downtown Airport, 10 Arch View

Holy Family Church, 120 East 1st Street
Holy Family Rental Building, 116 East 1st Street
Helen Huffman Elementary, 600 St. Robert Drive
John Bass, 95 Water Street
City Hall, 103 Main Street
Cahokia Street Department, 600 Levin Drive
Cahokia Shooting Range, 600 Levin Drive
Gateway Redevelopment Group, 222 Water Street
Turning Point Worship Center, 200 Water Street
Ken Fessler, 305 Water Street
Cahokia Gas & Mini Mart, 3 Water Street
Charles Schreiber, 707 Illinois 3
State Farm Insurance, 530 Illinois 3
Walter's Collision Repair, 125 Futura Plaza
Knight's of Columbus, 100 East 5th Street
Medicare Pharmacy & Medical Equip, 911 Water Street
Chuck Baer Realty, 113 Water Street
P.F.P. LLC, 310 Water Street
Gateway Area Bible Fellowship, 93 Water Street
Holy Family Parish Hall, 116 East 1st Street
Cahokia School District, 1700 Jerome Lane
8th Grade Academy, 1900 Mousette Lane
Oliver Parks 6th Grade, 1900 Mousette Lane
Estelle Sauget School of Choice, 1700 Jerome Lane
Lalumier Elementary, 6702 Bond Avenue
Penniman Elementary, 1820 Jerome Lane
Mitchell Martinez, 1183 Camp Jackson Road
American Freight, 1695 Camp Jackson Road
IMO'S, 1282 Camp Jackson Road
Hollywood Beauty Supply, 1645 Camp Jackson Road
Phillip Reyes, 601 Water Street
Michelle's Place, 1280 Camp Jackson Road
Cahokia Scotchwash, 1643 Camp Jackson Road
China Express, 1669 Camp Jackson Road
James Upchurch, 564 Mildred Avenue
Quick Stop, 995 Range Lane
Butch's Bar & Grill, 490 Jerome Lane

Mark Unnerstall, 1907 Camp Jackson Road	Taco Bell, 1616 Camp Jackson Road
White Castle, 1620 Camp Jackson Road	Walgreens, 1201 Camp Jackson Road
Cahokia Flower Basket, 3700 Falling Springs Road	Double Duece, 615 Falling Springs Road
Jayaniila Patel, 829 Upper Cahokia Road	More for Less, 800 Upper Cahokia Road
Kriste Bennett, 2130 Sandy Ridge Road	Day Care Center, 2147 Doris Avenue
Mike's Car Wash, 104 Jerome Lane	Pizza Hut, 1257 Camp Jackson Road
KFC, 1691 Camp Jackson Road	River Bluffs of Cahokia, 3354 Jerome Lane
Subway, 1246 Camp Jackson Road	Cahokia Pool-Rink, 200 Cahokia Park Drive
Prairies Golf Course, 300 Tricentennial Court	Cahokia Golf Course Maintenance, 103 Main Street
M Crockett Car Wash, 2205 Camp Jackson Road	Superior Auto Group LLC, 2225 Doris Avenue
SLBP, 1689 Camp Jackson Road	Kennique Beauty, 703 Upper Cahokia Road
Schnucks, 1615 Camp Jackson Road	Pioneer Restaurants LLC, 1508 Camp Jackson Road
Wal-Mart, 1511 Camp Jackson Road	Captain D's, 1512 Camp Jackson Road
Checkers, 1600 Camp Jackson Road	Cahokia Nursing and Rehab, 2 Annable Court
Cahokia Library, 140 Cahokia Park Drive	Park Maintenance, 212 Cahokia Park Drive
Kim Lean To, 1020 Camp Jackson Road	Family Dollar, 1022 Camp Jackson Road
US Bank, 1050 Camp Jackson Road	McDonalds, 1110 Camp Jackson Road
MotoMart, 1117 Camp Jackson Road	Citizens for McCall, 1204 Camp Jackson Road
Al's Automotive, 1217 Camp Jackson Road	KG Premier, 1228 Camp Jackson Road
Dobbs Tire Auto, 1300 Camp Jackson Road	Title Max, 1301 Camp Jackson Road
Dominos Pizza, 1302 Camp Jackson Road	Regions Bank, 1304 Camp Jackson Road
Buddy Gillan, 1321 Camp Jackson Road	Rick Reed, 1408 Camp Jackson Road
Payal Patel, 1612 Camp Jackson Road	Auto Zone, 1649 Camp Jackson Road
Dollar General, 1653 Camp Jackson Road	Little Caesars, 1671 Camp Jackson Road
Best Stop, 2001 Camp Jackson Road	Kingdom Refiners, 2007 Camp Jackson Road
Midwest Petroleum, 2201 Camp Jackson Road	Cahokia Sports & Service, 2203 Camp Jackson Road
H&R Block, 1667 Camp Jackson Road	Brauns Funeral, 3701 Falling Springs Road
Kofargo Dance Academy, 1504 Jerome Lane	Cahokia Fire Department, 1400 Doris Avenue
Bob Brockland, 1723 Sonny Lane	Quick Stop, 825 Upper Cahokia Road
FAA, 9951 Molla Drive	Citi Trends, 1210 Camp Jackson Road
Super Wash, 1302 Camp Jackson Road	Holiday Inn Express, 1607 Pontiac Drive
Tom Graddy Enterprises, 1699 Pontiac Drive	Ervon Inc., 1613 Camp Jackson Road
Emily Braun, 3700 Falling Springs Road	AT&T, 521 Range Lane
Bokonon LLC, 1411 Camp Jackson Road	Ampex Brands, 1691 Camp Jackson Road
Curtis McCall, Sr., 707 Range Lane	Lonnie Young, 532 Illinois 3
Habash Auto Sales, 532 Illinois 3	KBW Pizza, 1282 Camp Jackson Road
Omar Hamid, 2001 Camp Jackson Road	Realty Income Properties, 1257 Camp Jackson Road
John Cousin, 305 Water Street	Cahokia Activity Center, 190 Cahokia Park Drive
Ball Diamond, 1210 Camp Jackson Road	Cahokia Fitness, 509 Camp Jackson Road

Section 6.0 Alternate Water Sources

6.1 Interconnects with Other Water Systems

Illinois American Water Company - East St. Louis
 Rachel Bretz, Director of Water Quality and Compliance
 300 N. Water Works Drive
 Belleville, IL 62223
 618-874-2404 Office 618-779-1555 Office
 800-422-2782 After Hours 618-791-5273 24 Hours
 618-830-1820 Cell

6.2 Potable Water Suppliers

Absopure Water Company
1205 Paragon Drive
O'Fallon, IL 62269
800-422-7678 Office
314-624-0924 Office

Hubert Water Hauling
4532 Lizzy Lane
Smithton, IL 62285
618-233-5735 Office
618-530-5735 After Hours

American Red Cross (AB)
1639 Main Street
Alton, IL 62202
618-465-7704 Office

Prairie Farms Dairy
400 West US Highway 50
O'Fallon, IL 62269
618-632-3632 Office

Section 7.0 Flood Protection

7.1 Wells

Not Applicable

7.2 Water Treatment Plant

Not Applicable

Section 8.0 Power and Mechanical Failures

8.1 Electrical Failures

City Staffed Electrician(s):

Al Carter
107 Walnut Street
Cahokia Heights, IL 62206
618-604-6685 Cell
618-337-9505 Police Dept

8.2 Mechanical Failures

Dennis Traiteur, Director/Operator: 618-410-7808 Cell
James Culpepper, Leadman: 618-567-1738 Cell
Al Carter, Electrician: 618-604-6685 Cell

Police Department: 618-337-9505

8.3 Distribution System Failures

City Water & Sewer Field Staff and City Electrician(s):

Dennis Traiteur, Director/Operator: 618-410-7808 Cell
James Culpepper, Leadman: 618-567-1738 Cell
Al Carter, Electrician: 618-604-6685 Cell
Police Department: 618-337-9505

Section 9.0 Boil Water Order Procedure

9.1 Distribution System Contamination Procedure

9.1.1 Issuing Boil Water Order

1. Notify IEPA - Collinsville Regional Office
Gayle Battas, Regional Manager
618-346-5120 Office
618-346-5155 Fax
2. Notify City's Office and Field Staff
(Water & Sewer)
3. Notify St. Clair County Health Department
618-233-7703 Office
618-233-7713 Fax
4. Notify East Side Health District
618-271-8722 Office
618-875-5038 Office
618-874-4734 Fax
5. Notify media Outlets
See sections: 2.5.1; 2.5.2, 2.5.3
6. Notify Residential / Commercial Customers

9.1.2 Lifting Boil Water Order

After receiving notice of clean samples from Teklab;

1. Notify IEPA - Collinsville Regional Office
Gayle Battas, Regional Manager
618-346-5120 Office
618-346-5155 Fax
2. Notify City's Office and Field Staff
(Water & Sewer)
3. Notify St. Clair County Health Department
618-233-7703 Office
618-233-7713 Fax
4. Notify East Side Health District
618-271-8722 Office
618-875-5038 Office
618-874-4734 Fax
5. Notify media Outlets
See sections: 2.5.1; 2.5.2, 2.5.3
6. Notify Residential / Commercial Customers

9.1.3 Boil Order Notice

CITY OF CAHOKIA HEIGHTS WATER AND SEWER DEPARTMENT

BOIL ORDER NOTICE

At _____ (am / pm) on _____ (date) the City of Cahokia Heights Water &
Sewer Department issued a precautionary **BOIL ORDER** affecting (all its customers)
(customers located) _____

Water supply personnel will return the system to normal operation as soon as possible (by
action) _____

(after event) _____

After bacteriological samples demonstrate that the water is safe for domestic use. At present, the
water in the distribution system (may be) is subject to bacteriological contamination, which may
cause a number of waterborne diseases and/or general gastrointestinal distress.

Customers in the affected area are encouraged to treat all water for drinking or culinary purposes
by bringing it to a rolling boil for at least five (5) minutes.

For additional information, contact Sharlin Pfeffer, Assistant Water & Sewer Director at
618-515-2376

10.0 Employee Training

This document will be reviewed at least one time per year and updated as necessary. All employees are familiar with and will receive training on the information within this document at least one time per year and will use the same in emergency or disaster situations.

Signature and Date Mayor

Signature and Date Assistant Director

Signature and Date ESDA Coordinator

Signature and Date Director

11.0 Plans, Actions and Procedures

During the development of this ERP and the preceding RRA, water supply officials evaluated specific assets and scenarios that are created based on the threats, and critical equipment that were identified as well as other emergencies such as specific natural disasters (e.g., flood, hurricane, tornado, etc.) that may impede the water supply's mission of providing safe and adequate supplies of water to consumers.

With respect to **asset-based response planning**, the operational staff notes the following mitigation measures and procedures in the event that a major element (asset) of its disinfection or distribution system is damaged:

- Water supply and local government officials will assess the nature and severity of the damaged asset. Through their combined experience, determinations will be made regarding the need for contractor or technical assistance to return the water system to normal operation. Ultimately, the responsible operator in charge of the water system will make a determination of the measures necessary to respond to the situation in the most timely manner possible.
- The need for outside assistance, in part, will depend on the availability of redundant equipment and repair materials. These materials are generally located at the public works facility.
- To allow the necessary time to affect a repair on the water distribution system asset(s), the water system has over one day of stored water at any time. Further, process and distribution controls will be utilized to isolate and repair the compromised asset.
- In the event of a cyber-attack on one of the system assets, compromised computers will be disconnected, and breached components will be isolated to prevent further damage or the spreading of malware. SCADA and computer consultants will be employed as needed.
- In the event of a power failure, the system will acquire backup generators. The backup generators can supply electricity to the water system assets in the event of an electrical outage.
- Should a water system asset be damaged such that the system is rendered unable to supply water to its customers, operational staff will contact City, County and State Officials to ensure critical customers are notified of the emergency situation and contingencies are provided for potable water sources.
- Should an emergency situation occur that goes beyond the ability of local response, water supply officials will contact local and state ESDA. Additionally, contact will be made to the Illinois EPA and IEMA to corroborate the need for state relief efforts.
- During the emergency, water supply staff will monitor the situation through water distribution system controls. E.g., process control testing, chemical usage, tower elevations, system pressures and disinfectant residuals will give an indication of the status of the safety and capacity of the water system. The water system maintains adequate testing equipment to evaluate these areas of concern and the safety of the water supply.
- Upon resolution of the emergency condition and repair to the affected asset(s), the responsible operator in charge will conduct an evaluation of the water system. Should water quality monitoring be necessary, the operational staff will coordinate with the Illinois EPA and County Health Department as well as its contractual laboratory to ensure the safety of the water.
- Throughout the emergency situation, communication with Local, County and State Officials will be of the utmost concern. The water supply will use Illinois EPA (and IEMA) as the focal point in disseminating status reports and seek their advice on the necessary action to return the system to normal operations. The water system does not require specialized equipment for this communication and recognizes that its contractual laboratory can report necessary information in an electronic form for state regulatory purposes.

With respect to **scenario response planning**, the operational staff notes the following mitigation measures and procedures if a natural disaster (e.g., tornado, flood, etc.) impedes the normal operation of the water system:

- Water supply and local government officials will assess the nature and severity of the damage to the water distribution system. Through their combined experience, determinations will be made regarding the need for contractor or technical assistance to return the water supply to normal operation. Ultimately, the responsible operator in charge of the water system will make a determination of the measures necessary to respond to the situation in the most timely manner possible.
- The need for outside assistance, in part, will depend on the availability of redundant equipment and repair materials. These materials are generally located at the public works facility.
- To allow the necessary time to affect a repair on the water distribution system asset(s), the water system has over one day of stored water at any time. Further, process and distribution controls will be utilized to isolate and repair the compromised asset.
- In the event of a power failure, the system will acquire backup generators. The backup generators can supply electricity to the water system assets in the event of an electrical outage.
- Should a water system be damaged such that it is rendered unable to supply water to its customers, operational staff will contact City, County and State Officials to ensure critical customers are notified of the emergency situation and contingencies are provided for potable water sources.
- Should damage to the water distribution system occur that goes beyond the ability of local response, water supply officials will contact local and state ESDA. Additionally, contact will be made to the Illinois EPA and IEMA to corroborate the need for state relief efforts.
- During the emergency, water supply staff will monitor the situation through water distribution system controls. E.g., process control testing, chemical usage, tower elevations, system pressures and disinfectant residuals will give an indication of the status of the safety and capacity of the water system. The water system maintains adequate testing equipment to evaluate these areas of concern and the safety of the water supply.
- Upon resolution of the emergency condition and repair to the affected portion of the water system, the responsible operator in charge will conduct an evaluation of the water supply. Should water quality monitoring be necessary, the operational staff will coordinate with the Illinois EPA and County Health Department as well as its contractual laboratory to ensure the safety of the water.
- Throughout the emergency situation, communication with Local, County and State Officials will be of the utmost concern. The water supply will use Illinois EPA (and IEMA) as the focal point in disseminating status reports and seek their advice on the necessary action to return the system to normal operations. The water system does not require specialized equipment for this communication and recognizes that its contractual laboratory can report necessary information in an electronic form for state regulatory purposes.

PANDEMIC RESPONSE

EMERGENCY SITUATION MISSION OBJECTIVES:

1. Provide Quality Treated Potable Water Every Day
2. Support Local and Other Communities as can be done.
3. Maximize Safety Precautions for Staff
4. Continue business transactions with Customers and Suppliers

ACTIONS:

1. Communicate situation to all staff and Board of Trustees/Village Alderman/City Counsel.
2. Coordinate activities with local Emergency Action Team members and/or local Emergency Service and Disaster Agency (ESDA) as necessary.
3. Be prepared to provide personnel to other communities per local mutual aid agreements, Illinois Water/Wastewater Agency Response Network (ILWARN) or Illinois Public Works Mutual Aid Network (IPWMA).
4. Close Office and Water System Assets to the General Public and Suppliers:
 - a. Post Notice at Office and Water System Asset entrances and change message on answering machine to define situation and available emergency support for Customers.
 - b. Continue receiving payments via on-line credit card, drop box and US Postal mail.
 - c. Cash payments accepted & receipts provided only by pre-arranged telephonic arrangements.
 - d. Make payments to suppliers as timely as possible.
 - e. In addition to continuing Operations, maintain Security awareness of facility.
5. Limit Service Calls to emergencies (e.g., leaks, etc.) only.
6. Suspend Water Service Shut-Offs due to overdue account payments.
7. Establish an Employee Rotation Schedule for both Office and Water System Assets:
 - a. Minimize potential disease exposure to all employees at one time.
 - b. Allow employee absences due to personal or family illness, quarantines, school closings, etc.
 - c. Consider enlisting and training/cross training all applicable staff and board members to assist either Office or Water Distribution System needs.
 - d. Consider and implement multiple shifts as needed.
 - e. Continue Weekend Operation duties.
8. Continually evaluate Employee access to Emergency/First Aid Healthcare Services during disease outbreak.

CRITICAL SUPPLIES:

1. Treatment Plant Supplies and Chemicals to treat water for 30 days.
2. Hand Sanitizer / Soap
3. N95 Masks
4. Nitrile or Latex gloves
5. Isopropyl Alcohol
6. Paper Towels and Toilette Paper
7. First Aid Kits
8. Spray Bottles for bleach water
9. Emergency Food
10. Emergency Generator Fuel & Supplies

RE-OPENING OFFICE AND OPERATIONS

A. OBJECTIVES:

1. Always provide safe and adequate water.
2. Protect Staff such that business can be conducted to support Objective 1.
3. Pay Bills.
4. Receive payment for water sales to support Objective 2.

B. WORKING ASSUMPTIONS:

1. The old "Normal" is gone, and uncertainty exists as to "New Normal," specifically:
 - a. COVID-19 is here to stay and
 - b. No Vaccine, or quick & accurate Test, or specific treatment is yet available.
2. In general, Safety issues can be alleviated/minimized by: Engineered Solutions, and/or Administrative Controls, and/or Protective Equipment.

C. IMMEDIATE ACTIONS the water supply can operate in the "New Normal" culture:

1. Comply with "Workplace Health and Safety Guidance for Employees and Staff of Businesses," April 30, 2020, attached as Item "E" below, and Specifically:
 - Make sure that you can maintain at least 6 feet of physical separation between yourself and others around you, including your co-workers and customers.
 - Mark with signage or tape 6-foot spacing for employees and customers to maintain appropriate distance from one another.
 - Provide face coverings to employees, especially when it is not possible to maintain at least 6 feet of space between you and another person.
 - Provide hand washing stations with soap, clean water, and single use paper towels and encourage frequent hand washing for 20 seconds or longer.
 - Provide hand sanitizer (with at least 60% alcohol) & sanitizing products for employees and customers.
 - Regularly clean high-touch surfaces including doorknobs, light switches, shared equipment, toilet handles, sink faucets, and clock in/out areas.
 - Employees should not work if they are sick.
2. Continue Social Distancing between Staff and the Public:
 - a. Continue Closed Office & Water System Assets to Public, & entrance doors locked at all times,
 - In-office meeting by pre-arranged appointment only.
 - Only **one Visitor** at a time.
 - b. Continue masks/ gloves/ sanitizer use when in public areas.
 - c. Prior to any visitor entering Office or Water System Asset, or Staff member entering customer home or business, an adequate health history of the proposed visitor or visit site must be taken by phone first. (i.e.: Has anyone been exposed to COVID-19, on voluntary or other quarantine? Is anyone sick or have fever? Has anyone traveled out of state or country in last 2 weeks?). High risk visits should just be rescheduled unless dire (emergency) need.
 - d. To enter Customer home or business: Operators should have available masks, gloves, face shields, disposal coveralls, and "booties" shoe covers.
 - e. Schedule Customers' visits late in afternoon or weekends to meet customers' schedules, and so Operator can go home for shower/clothes change/disinfection.
 - f. Drive separately to field work sites and work as separately as possible, if more than 1 person needed for work outside of Public Work buildings.
 - g. Continue Staff cleaning Office and Water System Assets at end of every shift, and cleaning floors at least weekly per CDC/EPA guidelines (REF: <https://www.epa.gov/pesticide->

registration/list-n-disinfectants-use-against-sars-cov-). Remove all non-essential items/surfaces that may be touched (décor, etc.) in office to make cleaning easier or weekly professional cleaning and sterilization.

3. **Potential Office Operational/Structural Changes:**

- a. Promote On-Line Credit Card payments (consider incentives)
- b. Install professional appearance, permanent **“Sneeze Guards”** or Fabricated Plexi-Glass **Shields** mounted above Office Counter to separate Desk Areas from Common area.
REF: <https://www.menards.com/main/doors-windows-millwork/acrylic-glass-sheets/amerilux-0-220-thick-clear-acrylic-sheets/c1a18x24x220/doors-windows-millwork/acrylic-glass-sheets/amerilux-0-220-thick-clear-acrylic-sheets/c1a36x72x220/p-1539107082071.htm>
- c. Pedestal tape divider or barrier to keep Customers in designated area.
- d. Move Desks / Work Stations at least 6 feet away from each other in Office.
- e. **Install an improved “Drop Box”** through wall so Customers can deposit payments without entering building, or even touching door knobs.
- f. Construct barriers/large planters/bollards outside office works spaces.

4. **Potential procurement of UV-C or far-UV-C Disinfection lights** (details in Section “F” below) to augment disinfection efforts in Office & Lab areas:

- In air ducts in office for continuous use - 88% Efficiency 1st pass,
- Portable lamps on timer after work in Office
- Kills bacteria and viruses on surfaces (doesn't penetrate carpet, etc.)
- Demonstrated on Flu, Colds, Allergies - expected to work on Coronavirus
- **UV-C** can damage eyes, skin, and cause cancer, thus used only in unoccupied areas, or in HVAC Duct works.
- Newly developed, shorter wavelength **far-UVC light** can't reach or damage living human cells, but can penetrate and kill the very small viruses and bacteria floating in the air or on tables and other surfaces.

5. **Vaccinations every year:**

- Strongly recommend all staff and City members be inoculated for the Flu annually.
- When available, the same recommendation for **Covid-19** vaccination.

D. **ADDITIONAL FUTURE CONSIDERATIONS:**

1. If a substantial increase in cases of COVID-19 occurs increase cross training of staff and backups.
2. Separate Operator Office area in Shop for Field Operations.
3. Develop Flexible/Alternate shifts. E.g., Establish a rotating schedule where one Operator works 5:00 AM to 1:00 PM and another works 1:00 PM to 9:00 PM. Or, two Operators work Monday-Thursday 10 hour shifts and a third Operator works Friday-Saturday-Sunday 10 hour shifts.
4. “Drive-Through-Window with 2-way Pass-Through Drawer” (through wall to outside) for customers and passing Work Orders out-and-back on same day. (Ref: <https://www.quikserv.com/>)

BACKGROUND INFORMATION

E. April 30, 2020 Stay At Home Order:

<http://dph.illinois.gov/sites/default/files/Stay%20at%20Home%20Order%20-%20IDPH-OAG%20Workplace%20Health%20and%20Safety%20Guidance.pdf>



Office of the Illinois Attorney General
Kwame Raoul, Illinois Attorney General

Workplace Health and Safety Guidance for Employees and Staff of Businesses April 30, 2020

Practice Social Distancing

Pursuant to Executive Order 2020-32 (Stay at Home Order), your employer must comply, to the greatest extent feasible, with **social distancing requirements**. This means that your employer should:

- Make sure that you can maintain **at least 6 feet of physical separation** between yourself and others around you, including your co-workers and customers.
- Mark with **signage or tape** 6-foot spacing for employees and customers to maintain appropriate distance from one another.
- **Provide face coverings** to employees, especially when it is not possible to maintain at least 6 feet of space between you and another person.
- Provide **handwashing stations** with soap, clean water, and single use paper towels and encourage frequent handwashing for 20 seconds or longer.
- **Provide hand sanitizer (with at least 60% alcohol) & sanitizing products** for employees and customers
- **Regularly clean** high-touch surfaces including doorknobs, light switches, shared equipment, toilet handles, sink faucets, and clock in/out areas.

Do Not Work if You Are Sick

You should not report to work if you are experiencing **symptoms of Coronavirus Disease (COVID-19)**, including fever (100.4° or above), cough, shortness of breath, sore throat, chest tightness, extreme fatigue, loss of sense of taste or smell, diarrhea, muscle aches, or headaches.

If you are experiencing any of these symptoms, stay home and call your doctor.

Who You Can Contact if You Have Concerns About Social Distancing in Your Workplace

If you have concerns that your employer is not allowing for safe social distancing or that it is not maintaining a safe and sanitary work environment to minimize the risk of spread of COVID-19, please contact the Workplace Rights Bureau of the Illinois Attorney General's Office at 844-740-5076 or workplacerights@agr.state.il.us.

If you believe that two or more employees at your workplace have COVID-19, please notify your local public health department. A list of local health departments can be found here:

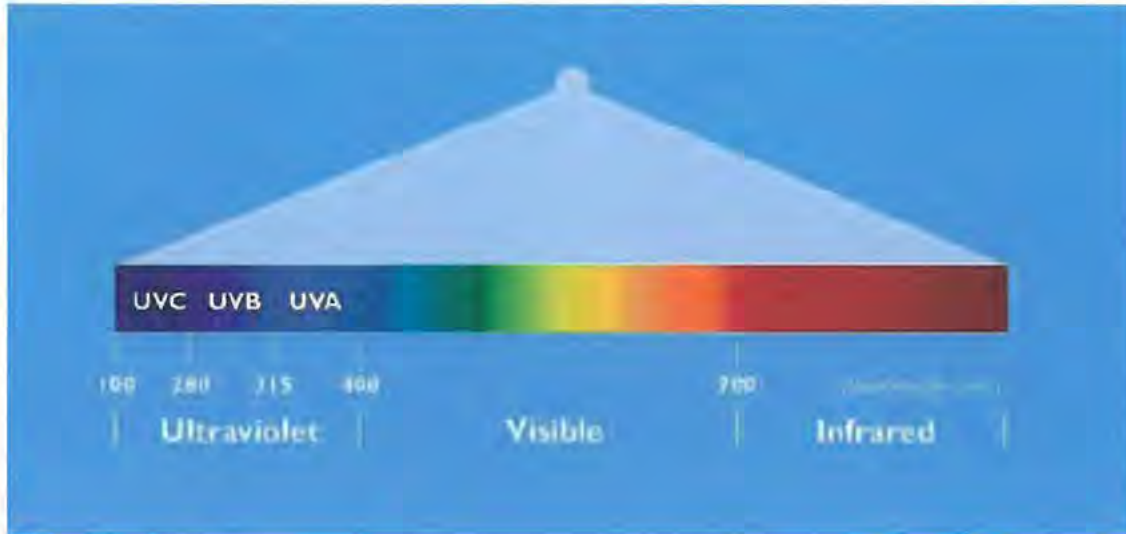
http://www.idph.state.il.us/IDPHPrograms/v_LHDDirectory/Show-V-LHDDirectory-Public.aspx.

Pursuant to Section 25(b) of the Whistleblower Protection Act, 740 ILCS 174, businesses are prohibited from retaliating against an employee for disclosing information when the employee has reasonable cause to believe that the information discloses a violation of a state or federal law, rule, or regulation.

For more information about COVID-19, including ways to protect yourself and others, visit the Illinois Department of Public Health's COVID-19 website: <https://www.dph.illinois.gov/covid19>.

F. UV-C DISINFECTION LIGHTS:

- 1) EXCERPT from Phillips Lighting <https://www.lighting.philips.com/main/products/special-lighting/uv-purification>



What is UV technology

Ultra-Violet (UV) light is invisible to human eyes. It can be subdivided into three categories: UVA, UVB and UVC. **UV-A from 315 to 400 nm UV-B from 280 to 315 nm UV-C from 100 to 280 nm. UVC radiation is known to break the DNA of bacteria, viruses and spores. As a result, they are rendered harmless.**

UV radiation can be used for multiple purposes in water and air treatment, but **is primarily employed as a disinfection process that inactivates micro-organisms without chemicals.** For other applications, UV is used for the removal of organic and inorganic chemicals, including chlorine, chloramines, ozone and Total Organic Carbon (TOC) emerging contaminants.

Benefits of UVC technology

UVC radiation has been proven to be effective against waterborne pathogenic microorganisms including those responsible for cholera, hepatitis, polio, typhoid, giardia, cryptosporidium and many other bacterial, viral and parasitic diseases

UVC radiation can be used to destroy chemical contaminants such as pesticides, hormones and other pharmaceuticals in drinking water or waste water

UVC installations have low capital and operation cost

UVC technology is environmentally friendly

UVC installations are easy to operate and to maintain

UVC radiation has no harmful effect TO SURFACES when overdosed

UVC radiation works instantly and the effectiveness does not depend on the water temperature

UVC disinfection is a physical process: no substances are added to the water

UVC disinfection is complementary to Chlorine disinfection: it deactivates organisms that are resistant to Chlorine such as giardia and cryptosporidium

UVC lamps can be easily regulated to optimize treatment for variations of water quality and for changing water flows

UVC radiation will keep the surface of reservoirs clean from biofilm
 The UVC disinfection effect is directly related to the UV dose (which is the product of intensity and exposure time of the micro-organisms) so it's effectiveness can be simply measured once the system design is validated

2) Reference: <https://eveescloset.com/products/38w-uv-lamp>

UVC LIGHT HAS BEEN SHOWN TO INACTIVATE (AKA, 'KILL') VIRUSES THAT ARE NEAR-RELATIVES OF THE VIRUS: SARS-COV-1 AND MERS-COV. THEREFORE, IT IS WIDELY EXPECTED TO BE EFFECTIVE AGAINST VIRUSES
 There are three UV light wavelength categories: UVA, UVB and UVC. Our LAMP produces UVC, the only wavelength known to be germicidal.



UV-C DISINFECTION LAMP

★★★★★ 7 reviews

~~\$299.99~~ \$199.99 USD **50% OFF**

ONLY 1 LEFT

- 1 +

BUY IT NOW

06

HOURS

:

59

MINUTES

:

46

SECONDS

PRODUCT DETAILS

SHIPPING UPDATE

ORDER NOW TO ENSURE YOUR SPOT.



Processing is 5 days. (14 days total to your door due to current demand.)

WHY OUR UV-C LAMP? The capacity is suitable for 10-25 sqm space, living room, bedroom and other household space, only 15 minutes for rapid sterilization and disinfection.

UV-C can sterilize places where ultraviolet light cannot reach.

- Ultraviolet (UV-C) light helps to eliminate 99% bacteria, viruses, fungus, molds, etc. on the surfaces of most household and personal items. Remove odors, bacteria, and dust mites which cause splenitis, pneumonia, asthma, and allergies.
- Portable design: space saving, to sterilize in the required area at any time.
- Simple operation easy to press ON/OFF button.
- Products used in your daily life, spoons, dishes, telephone handsets, desk, toilets, public places, automobile, etc., free from harmful bacterial pathogens. Keeping your rooms, closets and household appliances in a "Germ Free" antiseptic environment.

- 3) Chagona Products: <https://www.chagona.com/products/uv-disinfection-lamp-38w>



- 4) Far-UV-C Technology- EXCERPTED Report published April 9, 2020:
<https://www.post-gazette.com/news/health/2020/04/09/Ultraviolet-technology-far-UVC-light-disinfectant-COVID-19-coronavirus/stories/202004080113>

As researchers race to make effective vaccines to inoculate against COVID-19, development of new, better and faster disinfectant devices to slow its spread is also a high priority.

One of the brightest areas of that scientific research involves a spectrum of ultraviolet light - called “far-UVC light” - that kills the virus but doesn’t harm humans.

Use of far-UVC lamps, which provide little if any actual light, could eventually allow treatment of air and surfaces in many occupied indoor spaces, including hospital rooms. That would greatly reduce the viral exposure for hospital patients and medical personnel, and speed sterilization of the rooms and medical equipment, said David Brenner, a professor of radiation biophysics and director of the Center for Radiological Research at Columbia University in New York City.

“What we have developed is a particular UV wavelength region, around 222 nano-meters, which is as effective as conventional germicidal UV at killing viruses and bacteria but is also safe for human exposure,” Mr. Brenner said in an email response to questions. “So it can be used in occupied public spaces.”

Conventional, longer wavelength ultraviolet light has been used very effectively for more than a century to decontaminate air, water and surfaces in unoccupied indoor spaces. But it can cause cancer and cataracts in humans exposed to it.

The shorter wavelength far-UVC light can't reach or damage living human cells, but can penetrate and kill the very small viruses and bacteria floating in the air or on tables and other surfaces. Mr. Brenner said overhead far-UVC lights "could be used in any indoor location where people congregate," including in hospitals, doctors' offices, schools, airports, airplanes, trains, buses and other public spaces, and could help block the spread of the coronavirus.

Mr. Brenner said his team of researchers has been working for five years on development of far UVC lighting with a focus on its safety and effectiveness. Similar development is taking place in Japan, he said.

A 2018 study headed by Mr. Brenner and published in the peer-reviewed, on-line journal Scientific Reports, found that continuous low doses of far-UVC light can kill airborne viruses without harming human tissues, and inhibit seasonal influenza epidemics, as well as influenza pandemics.

The new far UVC lamps, in production by Ushio America Inc. and Eden Park Illumination, are not yet approved for medical uses but could be soon.

"The two roadblocks are ramping up to high capacity production and (Food and Drug Administration) approval," Mr. Brenner said. "A couple of weeks ago my best guess for both might be nine months but we are now trying to go faster than that.

Late last month the FDA issued an advisory that clears the way for use of sterilizer and disinfection devices, including the far-UVC lamps, in hospitals and other public health settings during the unique coronavirus pandemic and prior to formal FDA approval.

Dr. David Atcheson, a retired oral and maxillofacial surgeon in Pittsburgh, said it's past time to accelerate the UVC approval process and utilize the technology.

"We need someone to push this technology along, someone to shine a light on UV light," Dr. Atcheson said. "We need to get these lights out there and in use sooner than nine months from now."

Ryan Olsen, eastern regional sales manager at Ushio America, a subsidiary of Tokyo, Japan-based Ushio Inc., said the far-UVC lamps have been in limited production since 2018 but the COVID-19 pandemic has heightened interest from medical facilities. He said the lamps, which Ushio sells as components to production companies and not to the public, use a special filter to ensure no harmful wavelengths are emitted.

"We are ramping up production and working quickly now because we see the benefits of this type of lighting," Mr. Olsen said. "While (far-UVC) light does significantly reduce the amount of influenza and other viruses and pathogens on surfaces and in air, these issues will still be a fact of life ... just hopefully not in the severity we see them today."

Cy Herring, Eden Park's president, said the Champaign, Ill., company has been working with Mr. Brenner on a National Institutes of Health contract focusing on UV lights, and has been producing a small number of the far-UVC lamps for industrial applications since 2018.

"Now there's a big interest from the healthcare industry that's vastly larger than it was a couple of months ago, and that's been reflected in our orders," Mr. Herring said,

The lights are not cheap, but expanded production and sales could reduce their prices. A thin, two-inch square light, smaller than a drink coaster, costs about \$500; a four-inch light a little more than \$1,000, said Mr. Herring, adding that demand is strong and the company is looking to expand and hire more workers.

"We feel like we have a product that can help and prevent the spread of the virus from person to person," he said. "We're trying to figure out how to implement distribution. We're trying to do the best we can in a time of crisis."

Juliet Ferrelli, director of infection prevention at Allegheny Health Network's eight hospitals, said the healthcare system is aware of the far-UVC technology and recognizes its potential to complement existing use of ultraviolet decontamination systems in air handling units at all of its hospitals. UPMC also uses UV light treatments in its hospital bulk air handling systems.

"We've explored the use of far-UVC light in ERs (emergency rooms) and operating rooms and are looking into the technology, especially for the new hospital we are building in Wexford," Ms. Ferrelli said.

She said that while UV light is a well proven disinfection method, retrofitting all the rooms in an existing hospital would be quite expensive. AHN also uses mobile UV light robots, at its Allegheny General, Forbes and West Penn hospitals, but those robots can only be used in unoccupied rooms. "We are looking at use of the (far-UVC lighting) in other health care settings and evaluating if it makes sense in every hospital, in every room. And, given that we **already use UV in our air handling**, do we need both? "But as passive equipment for infection prevention, I definitely see its use as growing in the healthcare field."

Don Hopey: dhohey@post-gazette.com or 412-263-1983. Twitter: @donhohey.

**5) Far-UVC EXCERPT from: <https://www.biorxiv.org/content/10.1101/240408v1.full.pdf>
Abstract, posted December 28, 2017**

Airborne-mediated microbial diseases such as influenza and tuberculosis represent major public health challenges. A direct approach to prevent airborne transmission is inactivation of airborne pathogens, and the airborne antimicrobial potential of UVC ultraviolet light has long been established; however, its widespread use in public settings is limited because conventional UVC light sources are both carcinogenic and cataractogenic.

By contrast, we have previously shown that far-UVC light (207- 17 222 nm) efficiently kills bacteria without harm to exposed mammalian skin. This is because, due to its strong absorbance in biological materials, far-UVC light cannot penetrate even the outer (non-living) layers of human skin or eye; however, because bacteria and viruses are of micrometer or smaller 20 dimensions, far-UVC can penetrate and inactivate them. We show for the first time that far-UVC efficiently kills airborne aerosolized viruses, a very low dose of 2 mJ/cm² 21 of 222-nm light inactivating 22 >95% of aerosolized H1N1 influenza virus. Continuous very low dose-rate far-UVC light in indoor public locations is a promising, safe and inexpensive tool to reduce the spread of airborne-mediated microbial diseases.

G. ILCS Credit Card Fees Legislation, November 11, 2019:

- 1) Secretary of State Policy:



License Plates Renewal

A payment processor fee of 2.35% will be assessed for Credit Cards or a fee of \$1.22 will be assessed for Electronic Checks (if accepted). Credit card companies charge a fee for use of their cards. For most private businesses, these charges are built into the price of their products and services and is therefore transparent to the cardholder. By law, Illinois government cannot absorb this banking/payment processor fee, and therefore it must pass directly to the customer.
This transaction will appear on your credit card statement as: SOS INTERNET VEHICLE

- 2) Illinois Government Legislation EXCERPT:
<http://www.ilga.gov/legislation/ilcs/fulltext.asp?DocName=005003450K25>

50 ILCS 345/25)

Sec. 25. Payment of fees by cardholders.

(a) The governing body of a local governmental entity authorizing acceptance of **payment by credit card may, but is not required to, impose a convenience fee or surcharge** upon a cardholder making payment by credit card in an amount to wholly or partially offset, but in no event exceed, the amount of any discount or processing fee incurred by the local governmental entity. This convenience fee or surcharge may be applied only when allowed under the operating rules and regulations of the credit card involved. When a cardholder elects to make a payment by credit card to a local governmental entity and a convenience fee or surcharge is imposed, the payment of the convenience fee or surcharge shall be deemed voluntary by the person and shall not be refundable.

(b) No fee, or accumulation of fees, that exceeds the lesser of \$20 or 5% of the principal amount charged may be imposed in connection with the issuance of any license, sticker, or permit, or with respect to any other similar transaction. No fee, or accumulation of fees, that exceeds the lesser of \$5 or 5% of the transaction involved may be imposed in connection with the payment of any fine. No fee, or accumulation of fees, in excess of the lesser of \$40 or 3% of the principal amount charged may be imposed in connection with the payment of any real estate or other tax.

(c) Notwithstanding the provisions of subsection (b), a minimum fee of \$1 may be imposed with respect to any transaction.

Notwithstanding the provisions of subsection (b), a fee in excess of the limits in subsection (b) may be imposed by a local governmental entity on a transaction if (i) the fee imposed by the local governmental entity is no greater than a fee charged by the financial institution or service provider accepting and processing credit card payments on behalf of the local governmental entity; (ii) the financial institution or service provider accepting and processing the credit card payments was selected by competitive bid and, when applicable, in accordance with the provisions of the Illinois Procurement Code; and (iii) the local governmental entity fully discloses the amount of the fee to the cardholder.

(Source: P.A. 92-114, eff. 1-1-02.)

**ILLINOIS PUBLIC WATER SUPPLY
EMERGENCY PROCEDURES
QUICK REFERENCE GUIDE**

Revised 2-5-2004

EVACUATION

MOVE ALL EMPLOYEES AND VISITORS FROM THE ENTIRE FACILITY TO THE OUTSIDE GROUNDS

Evacuation routes are posted in each area.

1. Employees and visitors should move together as a group
2. Evacuate using stairway. DO NOT USE ELEVATORS!
3. Keep moving until the group is well away from the building, from smoke and fumes
4. Assist all injured parties throughout evacuation, until the injured person is placed in the hands of responsible emergency medical personnel

EVACUATION PROCEDURES

FIRE PROCEDURES

Race to Safety

R Rescue

Non-response (trained emergency response) employees and visitors in immediate danger should be evacuated from the building to a safe place, well away from fire and smoke, and rescue operations.

A Alert

- Alert the fire department by activating pull alarm or phoning 911.
- Alert on-site response employees to put on necessary safety gear.

C Contain the Fire

- Close all doors in the area of the fire.
- Make sure fire doors in other areas remain closed.

E Extinguish and Evacuate

- Extinguish fire with on-site fire extinguisher IF you can do so without placing yourself or others in danger.
- Evacuate the area to a safe place, well away from fire, smoke, fumes and rescue operations.

FIRE PROCEDURES

TORNADO WARNING/ACTIVITY

A Tornado warning will be announced throughout the plant by PA system and alarm

- Police and administrative office staff will monitor weather radios and contact the water treatment plant and pumping stations in event of a tornado.
- Plant personnel will have a weather radio in the control room and issue warning throughout the plant, over the radio to distribution crews, and to all other manned facilities.
- Close windows, shades, drapes, window coverings.
- Stay away from windows.
- Move all employees and visitors to an interior hallway, away from all treatment or pumping equipment, especially chemical feeders. Stay together.
- Remain calm and await "all clear" notification.
- In the event of damage, await "all clear".
 - Identify anyone injured or needing immediate assistance.
 - Call "911" for assistance.

TORNADO WARNING/SEVERE STORM

ELECTROCUTION

ELECTROCUTION CAN BE DANGEROUS FOR RESCUERS!

**BE ESPECIALLY CAREFUL IF WATER IS PRESENT ON
YOUR HANDS, THE FLOOR OR THE INJURED PERSON!
STAY DRY!**

Electric shocks from high voltage electricity such as power lines or rail way cables is instantaneously fatal. Never approach a casualty of this shock, as high voltage electricity can travel several meters through the air. Call 911 immediately and restrict the area from entry.

- **TURN OFF THE ELECTRICITY!**

Switch off the current or turn off the master switch.

- Move the injured person away from contact with the electricity source. Use a wooden chair, broom handle, or other dry non-metal object,
- Call 911.
- Check for breathing and pulse. Give CPR if necessary.
- Remember, the injured person may be burned.

ELECTROCUTION

CHEMICAL SPILLS

TOXIC CHEMICAL RELEASE: CHLORINE GAS, AMMONIA, LIQUID CHLORINE OR OTHER SUBSTANCE POSING IMMEDIATE HEALTH DANGER: Evacuate the area. Close all fire doors. Contact the fire department or appropriate emergency response crew immediately. If the substance is liquid and a drain is in the area of the spill, contact the sewer department.

If it is safe for you to clean up the spill:

READ MATERIAL SAFETY DATA SHEET (MSDS) FOR SPILLED CHEMICAL.

- Read the section **STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED.**
- Read the **WASTE DISPOSAL METHOD** listed.

LOCATE CHEMICAL SPILLS KIT:

- Apply gloves and protective eye wear.
- Use chemical pads located in the kit to soak up the spill.
- Place contaminated pads and gloves in the disposal bag and seal.

IF THE CHEMICAL IS A HAZARDOUS CHEMICAL WASTE, write the name of the chemical on the chemical label, attach the label to the disposal bag and notify a licensed Hazardous Waste Hauler for pick up. All other chemicals can be placed in regular trash.

- Follow the methods listed on the MSDS for cleaning the contaminated area.
- Replace items used from the Chemical Spill Kit.

CHEMICAL SPILL

BOMB THREAT

IF YOU RECEIVE A BOMB THREAT, TRY TO KEEP THE CALLER ON THE LINE AND ASK THE FOLLOWING QUESTIONS:

- Where is the bomb?
- What time will the bomb explode?
- Why was the bomb put there?

LISTEN FOR:

- Background noise such as music, voices, train whistles, construction, traffic, animal noises, clear, static, PA system, restaurant noises, or other sounds.
- Does the caller indicate knowledge of the water plant or pumping facility by descriptions of equipment or processes, locations, or comments?
- What are the voice characteristics:
 - Male or female?
 - Age?
 - Accent or ethnic words used?
 - What is the mental condition? (Angry, excited, frightened, etc.)

WRITE DOWN THE EXACT WORDS OF THE THREAT.

CONTACT WATER SUPERINTENDENT IMMEDIATELY AFTER CALLER HANGS UP. IF SUPERINTENDENT IS NOT AVAILABLE, CALL 911.

If it is necessary to search the work area:

- Look for anything out of place - bags, packages, boxes, containers.
- Notify superintendent or emergency responder (police, fire, security) immediately.
- DO NOT touch or try to move any package or item that may contain a bomb.
- Follow evacuation procedures if necessary.

BOMB THREAT

**IF ANYONE COMES INTO THE WORKPLACE WITH A WEAPON
OR CONCEALING A WEAPON:**

- Remain calm. Do not confront the person.
- Immediately call "911"
 - Notify Supervisor
 - Notify Security
- Limit access to the area where the person is located.

**WHEN POLICE ARRIVE, PROVIDE AS MUCH OF THE FOLLOWING
INFORMATION AS POSSIBLE:**

- Location of person with weapon
- Type of weapon (gun, knife, shotgun, grenade, dynamite, flammable chemical, or other substance)
- Location of weapon if person does not have it in hand or on their person. (In the middle desk drawer, on the bookshelf on the west wall, etc.)
- Is another person being threatened or held hostage? If so, where?
- The mental and emotional condition of the suspect with the weapon.

WEAPON



CITY OF CAHOKIA HEIGHTS

January 27, 2022

RE: SANITARY SEWER OVERFLOW EMERGENCY RESPONSE PROCEDURES (Amended)

Mr. Adamiec,

Per your request, I have updated our SSO Procedure List.

The purpose of this document is to set procedures for the City of Cahokia Heights Water and Sewer staff responding to emergency situations and to accurately and consistently identify, investigate, and report sanitary sewer overflows (SSOs) in compliance with the Illinois Environmental Protection Agency's regulatory requirements.

It is the City's goal to protect public health and safety, and prevent adverse impacts to the environment. Primarily our staff is expected to achieve timely and expeditious response to reports of all potential SSOs, as well as ensuring all reasonable steps are taken to contain and prevent sewage from entering homes, yards, ditches and other sections of the City's service area. The City's sewer department staff will do their best to minimize or correct any adverse impact of overflows in case they occur.

I. Objectives

- A. Provide timely and proper notifications of responders, regulatory agencies, and other potentially affected entities (see list of persons and/or agency contacts on page two)
- B. Minimize adverse impacts of SSOs
- C. Ensure corrective action is taken in a timely manner
- D. Ensure compliance with current regulatory requirements
- E. Ensure accurate and consistent identification, investigation, and reporting of emergency response situations
- F. Ensure appropriate staff are aware of and follow the emergency response plan, and address emergency operations and other necessary response activities

II. Roles and Responsibilities – City of Cahokia Heights Staff

- A. Administrative: Responsible for processing forms and providing reports to management as required per procedure.
- B. Administrative: Responsible for these procedures and ensuring it satisfies requirements of the IEPA. Also responsible for providing a sewer department laborer when a SSO is identified and for flow monitoring services.
- C. Public Relations: The mayor will appoint someone responsible for interface between the City and the public, the media.
- D. Office Clerks: Responsible for utilizing call-handling procedures to determine callers' reported problems. Relay all call information to the Sewer Foreman in a timely manner
- E. Administrative: Responsible for site investigation, containment, recovery, service restoration, cleanup, data collection, reporting, and following customer contact procedures detailed in this procedure list.
- F. Laborers: Any water/sewer staff who witness an SSO will notify a supervisor in a timely manner. At any given time during an emergency event, any staff within this department can be assigned to various tasks or perform any given function relating or pertaining to event-driven requirements.

Cordially,

Sharlin K. Pfeffer, Assistant Director
City of Cahokia Heights Water & Sewer Department



CITY OF CAHOKIA HEIGHTS

Page Two

List of contacts for SSO events:

Adamiec, James <Adamiec.James@epa.gov>; Brown, Michael L. <Michael.L.Brown@Illinois.gov>; Carlson, Deborah <carlson.deboraha@epa.gov>; Cc: James Nold <jnold@hurst-rosche.com>; chris.decker@amwater.com; Gayle.renth@illinois.gov; Gillian <asque.gillian@epa.gov>; Joseph Stitely <Joe.Stitely@Illinois.gov>; joseph.ahlvin@amwater.com; Maraldo, Dean <Maraldo.Dean@epa.gov>; mscoggins@crowderscoggins.com; R5Weca@epa.gov; Rachel.bretz@amwater.com; Sam F Saucier <Sam.Saucier@amwater.com>; Terry Sudholt <tsudholt@hurst-rosche.com>; todd.bennett@illinois.gov; wayne.caughman@illinois.gov; Zach York <zyork@hurst-rosche.com>

Appendix K

Maintenance Program



**City of Cahokia Heights
Water & Sewer Department**

EQUIPMENT MAINTENANCE PROGRAM

City of Cahokia Heights

Water & Sewer Department

Heavy equipment maintenance checklist

This maintenance checklist has been broken down into checks that are required daily, versus checks that are required based on operating hours. Each piece of construction equipment will be used at different times and for different durations. That's why the schedule of preventive maintenance is based on hours in operation instead of by date.

Daily pre-operation checks:

Before firing up the equipment, operators are required to perform a visual inspection before signing off and the beginning of their shift. This includes a variety of hands-on and visual inspections before, during, and after operating the heavy equipment. Operators should note any issues as soon as they are noticed so they can be addressed in a timely manner.

Pre-start checks (walk around)

Before you start the heavy equipment, perform these checks:

- **Parking:** Is the piece of equipment parked in a safe space?
- **Hazards:** Are there any tripping hazards? Are there any overhead hazards?
- **Damaged/worn/loose parts:** Inspect the overall condition.
- **Leaks:** Look under the equipment for any wet spots.
- **Fluid analysis:** Check engine oil fluid levels, power steering fluid levels, windshield washer fluid.
- **Undercarriage:** Look for worn or missing bogies or rollers, track tension, and overall condition on excavators.
- **Check tires:** Look for low or sagging tires, cuts to cord depth, damage, and general wear.
- **Valve stems:** Are caps present and securely screwed?
- **Steering:** Check for excessive play.
- **Belts:** Check for cracks, fraying, or splits.
- **Hoses:** Check for pinched, cracked, or loose hoses.
- **Suspension system:** Does the equipment bounce or vibrate when it's in motion? Listen for any irregular noises when going over bumps or turning the wheel.
- **Battery:** If accessible, inspect cables, clamps, and connections. Are any loose? Is there any corrosion?
- **Cab condition:** Check glass, mirrors, wiper blades, horn, and seat belts.

Warm-up checks

Perform these checks after the equipment has been running for five to 10 minutes:

- **Air filter system:** Check for warnings. Replace or clean the filter if necessary.
- **Listen for unusual noises**
- **Dashboard gauges:** Do they appear to be working and at safe, operating levels?
- **Lights:** Test the lights. Headlights, high beams, signal lights, brake lights, and backup lights.
- **Hydraulic system:** Test all hydraulic lines and systems. For example, with a dump truck, raise the dump body, or with an excavator, move the bucket, stick, and boom. Listen and watch for issues. Are there any leaks? Is everything functioning properly? Are there any irregular noises?
- **Check fluid levels:** Engine, steering tank, hydraulic oil, power terrain, engine coolant, and swing drives.
- **Brakes:** Test that the brakes work properly.

Daily operating checks

ID #1338

During operation, watch and listen for irregularities:

- **Listen for unusual noises**
- **Monitor gauges**
- **Feel for excessive vibrations**
- **Watch for any equipment performance changes**

Shutdown check

After every shift, take the following actions:

- **Fill the fuel tank:** Fill the tank all the way to full.
- **Idle engine:** Allow the vehicle to idle for five minutes before shutting down completely.
- **Park the vehicle in a safe place:** Engage the parking brake.
- **Clean or wash vehicle:** As needed.

Every 250 to 500 hours:

Around 250 to 500 hours, it is best practice to schedule a basic engine service. This involves a number of checks and actions:

- **Perform oil changes**
- **Change oil filters**
- **Change engine air filters**
- **Change fuel filters**

Oil change intervals will rely on the quality of oil and filter being used in each piece of equipment.

Every 1,000 to 1,200 hours

- **Replace cabin air filters**
- **Replace coolant filter** (if applicable)
- **Inspect air dryer** (if applicable)

Every 4,800 to 5,000 hours

- **Change return filters:** Applicable for heavy equipment like hydraulic excavators.
- **Check hydraulic filters:** Replace at 80%.
- **Check hydraulic oils:** Fill or change if necessary.
- **Conduct transmission differentials service**
- **Check pins and bushing:** How much play is in the joints? Are they worn out?
- **Check radiator**
- **Change antifreeze,** except when coolant is Extended Life Coolant (ELC).
- **Check hydraulic tank**

Cross-reference the equipment manual

While the checklist above will help with preventative maintenance and be a great addition to any maintenance plan, we recommend cross-referencing these checklist items and frequencies with the ones listed in the manual for each piece of heavy equipment.

Each machine will have its own manufacturer's recommendations that operators and fleet managers should familiarize themselves with.

Schedule regular maintenance

Successful heavy equipment management requires a commitment to the maintenance schedule.

Know the equipment history & storing service records

Each piece of equipment should have a detailed record including maintenance history, repairs, and any major issues or incidents.

This type of information is useful when it comes to future maintenance or repairs and helps fleet managers be more effective. With an organized record of equipment history, they can schedule preventive maintenance more accurately, which helps minimize operating costs.

City of Cahokia Heights

Water & Sewer Department

Equipment Maintenance Checklist

Pre-start checks (walk around)

Before you start the heavy equipment, perform these checks:

- ☐ **Parking:** Is the piece of equipment parked in a safe space?
- ☐ **Hazards:** Are there any tripping hazards? Are there any overhead hazards?
- ☐ **Damaged/worn/loose parts:** Inspect the overall condition.
- ☐ **Leaks:** Look under the equipment for any wet spots.
- ☐ **Fluid analysis:** Check engine oil fluid levels, power steering fluid levels, windshield washer fluid.
- ☐ **Undercarriage:** Look for worn or missing bogies or rollers, track tension, and overall condition on excavators.
- ☐ **Check tires:** Look for low or sagging tires, cuts to cord depth, damage, and general wear.
- ☐ **Valve stems:** Are caps present and securely screwed?
- ☐ **Steering:** Check for excessive play.
- ☐ **Belts:** Check for cracks, fraying, or splits.
- ☐ **Hoses:** Check for pinched, cracked, or loose hoses.
- ☐ **Suspension system:** Does the equipment bounce or vibrate when it's in motion? Listen for any irregular noises when going over bumps or turning the wheel.
- ☐ **Battery:** If accessible, inspect cables, clamps, and connections. Are any loose? Is there any corrosion?
- ☐ **Cab condition:** Check glass, mirrors, wiper blades, horn, and seat belts.

City of Cahokia Heights

Water & Sewer Department

Equipment Maintenance Checklist

Warm-up checks

Perform these checks after the equipment has been running for five to 10 minutes:

- ☐ **Air filter system:** Check for warnings. Replace or clean the filter if necessary.
- ☐ **Listen for unusual noises**
- ☐ **Dashboard gauges:** Do they appear to be working and at safe, operating levels?
- ☐ **Lights:** Test the lights. Headlights, high beams, signal lights, brake lights, and backup lights.
- ☐ **Hydraulic system:** Test all hydraulic lines and systems. For example, with a dump truck, raise the dump body, or with an excavator, move the bucket, stick, and boom. Listen and watch for issues. Are there any leaks? Is everything functioning properly? Are there any irregular noises?
- ☐ **Check fluid levels:** Engine, steering tank, hydraulic oil, power terrain, engine coolant, and swing drives.
- ☐ **Brakes:** Test that the brakes work properly.

Daily operating checks

During operation, watch and listen for irregularities:

- ☐ **Listen for unusual noises**
- ☐ **Monitor gauges**
- ☐ **Feel for excessive vibrations**
- ☐ **Watch for any equipment performance changes**

Shutdown check

After every shift, take the following actions:

- ☐ **Fill the fuel tank:** Fill the tank all the way to full.
- ☐ **Idle engine:** Allow the vehicle to idle for five minutes before shutting down completely.
- ☐ **Park the vehicle in a safe place:** Engage the parking brake.
- ☐ **Clean or wash vehicle:** If a washing station is available.

City of Cananda Heights**Water & Sewer Department****Equipment Maintenance Checklist****Every 250 to 500 hours:**

Around 250 to 500 hours, it is best practice to schedule a basic engine service. This involves a number of checks and actions:

- ☐ Perform oil changes
- ☐ Change oil filters
- ☐ Change engine air filters
- ☐ Change fuel filters

*Oil change intervals will rely on the quality of oil and filter being used in each piece of equipment.

Every 1,000 to 1,200 hours

Around 1,000 to 1,200 hours, perform these checks:

- ☐ Replace cabin air filters
- ☐ Replace coolant filter (if applicable)
- ☐ Inspect air dryer (if applicable)

Every 4,800 to 5,000 hours

Around 4,800 to 5,000 hours, take the following actions:

- ☐ Change return filters: Applicable for heavy equipment like hydraulic excavators.
- ☐ Check hydraulic filters: Replace at 80%.
- ☐ Check hydraulic oils: Fill or change if necessary.
- ☐ Conduct transmission differentials service
- ☐ Check pins and bushing: How much play is in the joints? Are they worn out?
- ☐ Check radiator
- ☐ Change antifreeze, except when coolant is Extended Life Coolant (ELC).
- ☐ Check hydraulic tank

City of Cahokia Heights Water & Sewer Department Equipment Checklist[illegible]



City of Cahokia Heights
Water & Sewer Department

VEHICLE MAINTENANCE PROGRAM

Vehicle Maintenance Program

The goals of the vehicle maintenance program of the Cahokia Heights Water & Sewer Department are to support safe, reliable, and high quality transit services while making maximum use of financial resources. The purpose of the maintenance plan is to provide consistent, systematic and integrated program guidance that will enable the City of Cahokia Heights to properly maintain and service its vehicles in support of revenue operations. An effective maintenance plan ensures safe, clean and comfortable transit vehicles on the road and maximizes transit vehicle life.

Preventive Maintenance (PM)

Regular maintenance is performed at pre-scheduled cycles (the first week of the month) to ensure optimal performance, efficiency, safety and reliability of assigned equipment. Preventive maintenance is based on the manufacturer's suggested recommendations.

During the PM scheduled service, the employee will document all defects found and will have all defects listed on the repair order and corrected prior to returning the transit vehicle to service.

Maintenance Records

Maintenance records will be kept for each vehicle. All maintenance performed on the vehicle will be recorded and maintained for as long as the Water & Sewer Department owns the vehicle.

Accident/Incident Reporting

City of Cahokia Heights Water & Sewer Department employees are required to report all accidents and incidents. Report forms are available for this purpose (See Attachment A). Notification procedures have been established so that drivers are aware of whom to contact in case of an accident or emergency. Transit employees are also aware of the drug testing requirements in certain accident situations.

Attachment A Accident/Incident Report Form

Vehicle Accident Report Form
Incident Injury Report Form

Monthly Vehicle Inspection Form

DRIVER: USE THIS CHECK LIST AS A GUIDE FOR INSPECTING THE VEHICLE.

CHECK "OK" IF ITEM FUNCTIONS PROPERLY AND "REPAIR" IF REPAIR IS NEEDED.

Vehicle receiving inspection:

(VIN #) _____ Unit:# _____

Odometer Reading: _____ Driver Name: _____

OK/Yes	Repair	Engine Off Criteria
		Engine oil within acceptable limits
		Fan belts tight and show no obvious damage
		Coolant level acceptable
		Tire tread and sidewalls show no damage
		Tire inflation
		Windows clean inside and out
		Windshield wipers clean and not stuck to windshield
		Seal belt functions correctly
		Emergency/Incident reporting kits available
		Fire extinguisher available
		Engine On Criteria
		Headlights function on both HI and Lo Beam
		Turn signals function
		Brake lights function including third brake light
		Reverse lights/Backup alarm functions
		Fuel leaks discovered
		Horn sounds
		Mirrors function and are clean
		Brakes function correctly
		Any new damage noted prior to using this vehicle

Notes: _____

I have personally inspected the vehicle above and have found it to be in the condition listed above.

Signature: _____

Date: _____

Maintenance Schedule (Normal Conditions)

Follow the Normal Maintenance Schedule if the severe driving conditions specified in the Severe Conditions Maintenance Schedule do not apply.

NOTE: If you only OCCASIONALLY drive under a "severe" condition, you should follow the Normal Conditions Maintenance Schedule.

[illegible]



City of Cahokia Heights
Water & Sewer Department

VEHICLE MAINTENANCE PROGRAM

Vehicle Maintenance Program

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Attachment A Accident/Incident Report Form

Vehicle Accident Report Form
Incident Injury Report Form



Motor Vehicle Accident Report

City Of Cahokia Heights

Department		Accident Date	Accident Time	Report Date	Report Time	Name of Immediate Supervisor	
Occupation		Employment Status: ☐ Full Time ☐ Part Time ☐ Seasonal ☐ Other:					
EMPLOYEE	Name		Date of Birth	Age	Home Phone (931) -		Work Phone (931) -
	Home Address		City		State	Zip	
	Equipment Used at Time of Accident ☐ Seat Belt ☐ Other						
SIGN	I understand and agree the information contained on this form is true and correct to the best of my ability.						
	Employee Signature:				Date:		
FOLLOWING SECTIONS TO BE COMPLETED BY EMPLOYEE'S SUPERVISOR							
ACCIDENT INFORMATION	Accident Location (street address or nearest street)						City Property ☐ Yes ☐ No
	Describe What Happened				Collision Type	Contributing Factors By City Driver ☐ Unavoidable ☐ Preventable	
					Vehicle Make	Model	Year
	Sketch Accident Scene Below				Damage to City Vehicle ☐ Over \$1,000 ☐ Vehicle Towed from Scene		
					Name of Other Driver		
					Address of Other Driver		
					City	State	Zip Code
					Home Phone Number () -		Work Phone Number () -
					Other Driver's Vehicle (Year, Make, Model)		
					Other Driver's License (Number and State)		
Witness Name							
Home Phone Number () -		Work Phone Number () -					
SUPERVISOR'S INFO	Was Employee Injured? ☐ Yes ☐ No		Was DOT Drug/Alcohol Screening Done? ☐ Yes ☐ No		Was Safety Coordinator or HR Notified? ☐ Yes ☐ No		
	What Steps Are Being Taken To Prevent A Similar Accident?						
	Did Accident Involve a Fatality or Hospitalization of 3 or More Employees? ☐ Yes ☐ No			Was Anyone in Accident Treated Medically Away from Accident Scene? ☐ Yes ☐ No			
	Weather at Time of Accident			Was Employee Trained to Operate Vehicle? ☐ Yes ☐ No		Was Accident Reported To Police? ☐ Yes (attach copy) ☐ No	
REVIEW	Report Prepared By			Signature			Date
	Supervisor Reviewing Report			Signature			Date
	Department Head			Signature			Date
	Date Received by Risk Management			Follow Up Required ☐ Yes ☐ No		Other Action	Send Report to HR ☐ Yes

Monthly Vehicle Inspection Form

DRIVER: USE THIS CHECK LIST AS A GUIDE FOR INSPECTING THE VEHICLE.

CHECK "OK" IF ITEM FUNCTIONS PROPERLY AND "REPAIR" IF REPAIR IS NEEDED.

Vehicle receiving inspection:

(VIN #) _____ Unit: # _____

Odometer Reading: _____ Driver Name: _____

OK/Yes	Repair	Engine Off Criteria
		Engine oil within acceptable limits
		Fan belts tight and show no obvious damage
		Coolant level acceptable
		Tire tread and sidewalls show no damage
		Tire inflation
		Windows clean inside and out
		Windshield wipers clean and not stuck to windshield
		Seat belt functions correctly
		Emergency/Incident reporting kits available
		Fire extinguisher available
		Engine On Criteria
		Headlights function on both HI and Lo Beam
		Turn signals function
		Brake lights function including third brake light
		Reverse lights/Backup alarm functions
		Fuel leaks discovered
		Horn sounds
		Mirrors function and are clean
		Brakes function correctly
		Any new damage noted prior to using this vehicle

Notes: _____

I have personally inspected the vehicle above and have found it to be in the condition listed above.

Signature: _____

Date: _____

Appendix L

Staffing Information

City of Cahokia Heights Job Descriptions

Water & Sewer Laborer

Department: Water & Sewer

Employment Status: Full Time

FLSA Status: Non-exempt

Experience Required: None

Minimum Education Requirements: High school diploma or equivalent

Reports to: Water & Sewer Field Director

Primary Work Location: Outdoors

Physical Requirements: Often required to work non-traditional working hours, which include weekends, holidays, and nights. The employee is frequently required to sit, stand, walk, run, talk and hear. The employee is occasionally required to use hands to finger, handle or operate objects, controls or tools. Must be able to reach with hands and arms, climb or balance, stoop, kneel, crouch or crawl and smell. The employee must occasionally lift and/or move more than 50 pounds.

Certification: Possession of a valid driver's license with the capability of obtaining a CDL license.

Job Summary: The Water and Sewer Laborer performs a variety of skilled and semi skilled duties required to operate, maintain and repair the facilities of the water distribution and wastewater collection system.

Essential Job Functions:

An employee in this position may be called upon to do any or all of the following essential duties:

- A. Assist in the installation, repair and maintenance of water mains, hydrants and gate valves.
- B. Flush water mains, hydrants and sewers
- C. Cleans and grades dirt around water/Sewer lines using pick, shovel, wheelbarrow and ax as scheduled or assigned.
- D. Loads and unloads tool and equipment onto and from truck as directed.
- E. Repair and test motors.
- F. Assist in the operation of a pumping station or other equipment.
- G. Tap and inspect new service connections.

- H. Keeps a sufficient inventory of materials, tools and equipment on site to perform job duties without interruption.
- I. Place safety barrier(s) around worksite as appropriate to protect the worker and public.
- J. Investigate consumer complaints.
- K. Respond to complaints regarding water leaks and pressure loss or not water, and evaluate situations.
- L. Perform custodial duties at the pump and/or sewer lift stations.
- M. Collect and dispose of debris
- N. Assist in the cleaning, testing, installation and repair of water meters.
- O. Read meters as necessary
- P. Dig ditches and holes to make repairs.
- Q. Inspect manholes to determine condition and locate stoppages or blockages.
- R. Service, adjust and make minor repairs to equipment, machines and attachments to equipment or hoses.
- S. Complete (Julie) Locate requests
- T. Perform related task as required.
- U. Complete necessary paperwork required for daily jobs and task.
- V. May be asked to perform other task.

Essential Functions, Qualifications, Knowledge, Skills and Abilities for Employment.

An employee in this position must have the following knowledge, skills, and abilities:

Knowledge

- Light, medium and heavy equipment principle, practices and procedures.
- Minor equipment maintenance and repair functions.
- Hazards and safety precautions common to mechanized equipment operation.
- Department policies and procedures.
- Safety rules and regulations.
- Material commonly used in construction, maintenance and repair.
- Occupational hazards and safety standards and practices applicable to work being conducted.

Skills:

- Handle stress effectively without it interfering with performance.
- Organize, set priorities, and exercise sound independent judgement within areas of responsibility.
- Operation, maintenance and routine repair of equipment used in public works construction and maintenance.
- Communicate clearly and effectively, both orally and in writing.

Abilities:

- Establish and maintain highly effective working relationships with other employees and the public.
- Work alone and make decisions with little to no supervision.
- Follow a firm work schedule as directed by supervising director.
- Act effectively in emergency and stressful situations.
- Perform work that is routine and detailed.
- Speak and write clearly and accurately (to include correct spelling)
- Move hands easily and skillfully to handle/operate tools and or machines to perform required tasks.
- Able to hand special projects of diverse nature as assigned.
- Adhere to all City and departmental safety and procedures.

Work Environment:

- Wet humid conditions
- Work near moving mechanical parts.
- Outdoor weather conditions
- Extreme Cold
- Extreme Heat
- Risk of Electrical shock

Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions of this job.

Daily Job duties for the City of Cahokia Heights Sewer Department

Filed Director Sewer – Oversees the daily operations of the sewer system. Assist with troubleshooting and repairing any sewer station or by-pass station in the City.

Equipment Operator/Laborer – Inspects 10 Sewer stations and By-passes on the North & South side of the City. Operates backhoe as needed, assist with troubleshooting and repairs daily of lift station or by-pass stations.

Foreman – Oversees the checking, repairs and maintenance of the newer employees working on the East & West Sewer Lift stations and by-passes.

Laborer- Mans the pumps on the by-passes on the South side of the City.

Laborer- Checks bypasses and pumps on the East & West side of the City.

Laborer- Mans the pumps on the by-passes on the North & South side of the City.

Laborer – Inspects the by-pass and pump stations on the East & West end of the City.

All stations and by-pass stations are checked daily. If a problem is discovered employees work as a team to make immediate corrective action.

One Laborer- Off W/C

Appendix M

Additional Operations and Maintenance Information



Operation and Maintenance (O&M) Manual

for:

***City of Cahokia Heights
Sewer Collection***

Sewer Collection Maintenance (O&M) Manual

Table of Contents

- I. Introduction**
- II. Facilities Locations, Activities and Pollution Control Measures**
 - 1. Water & Sewer District**
 - 2. Sanitary Sewer Pump Stations**
- III. Field Activities and SOPs**
- IV. Inspections**
- V. Employee Training**
- Sewer Collection Operation and Maintenance (O&M) Manual**

- I. Introduction**

This manual is designed to assist Sewer system personnel on how to properly implement best practices on City owned facilities .

- II. Facilities Locations, Activities and Control Measures**

- 1. Facility**

Location- Located 2525 Mousette Lane.

Activities Vehicle Storage, Supplies and Jet-Vac Equipment Cleaning.

Control Measures SOPs

Good House Keeping. Good housekeeping practices offer a practical and cost-effective way to maintain a clean and orderly facility. Good housekeeping practices also help to enhance safety and improve the overall work environment.

- Trash and litter are to be picked up from indoor and outdoor work areas daily.
- The yard will be walked to pick up and dispose of litter daily
- The paved surfaces around the building will be swept every two weeks.
- All buildings that have floor drains are connected to the sanitary sewer.

Vehicle and Equipment Parking Areas

- Vehicles and equipment will be parked on the approved designated areas
- If any oil or antifreeze leaks are discovered, a drip pan will be used to collect the fluids and vehicle will be scheduled for repairs.
- Any leaks or spills that do wind up on the pavement will be cleaned using dry methods (absorbent material, sweep when dry and dispose in the garbage can)

Vehicle and Equipment Washing Areas

- Vehicles are washed at the car wash or at the side of the building.

Vehicle and Equipment Maintenance Areas

- All major repairs and maintenance activities are conducted at an outside vendor location.
- Activities such as adding oil to engines is done indoors.
- Oils and other automotive fluids are neatly and cleanly stored.
- Equipment that is stored outside will be inspected prior to use to make sure that all drips are contained and/or repaired.

2. Sanitary Sewer Pump Stations

Locations

No.	Lift Station Name	Location	Nearest Intersection	# of Pumps	Pump Manufacturer	Pump Horsepower
1	Water Infrastructure					
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						

19	Water Infrastructure
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	

43	Water Infrastructure
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	

64	Water Infrastructure
65	
66	
67	
68	
69	

Activities

Pump Maintenance: Change gear oil every year. Pumps take about 1 qt. to 5 gallons of oil.

- Clean up area when service is finished

Grounds Maintenance: sweep inside the pump building. Control weeds on 69 of the 69 pump stations with round-up. .

- Control herbicide over spray
- Follow manufacturers recommendations when using and disposing of herbicide

Pump replacement: Done by city employees. The pumps are pulled out and set to an outside vendor repair facility.

- Clean up area when service is finished

Control Measures SOPs

Good house keeping. Pick up garbage around the site

Preventive maintenance- Visual inspections every week.

- Organic matter (grass clippings);
- Garbage;

Control Measures SOPs

General Cleanliness

- Trash and litter are to be picked up weekly.
- The paved surfaces around the area will be swept as needed.
- Weekly visual inspection
- Annual

III. Field Activities and SOPs

Activities

Jet-Vac Cleaning of Pipes and MHs, Excavation , Pipe Line Spot Repairs, MH Surface Collaring, CCTV Inspections, Man Hole Inspections, Dry Weather SSO Screening / Wet Weather SSO Screening.

Cleaning SOPs

The purpose of cleaning sewer collections system is to prevent SSOs and ensure that the collection system is in good working condition.

- Conduct visual inspection of equipment to insure safe operation.
- Verify that suction hoses clamps are tight and secured.
- Hoses and pipes are rinsed inside the MH.
- Dump and rinse holding tank of Vac Truck at the Disposal Facility
- Jet/Vac and maintenance trucks are washed with soap and water .
- Jet/Vac Vehicles are parked indoors.

Excavation SOPs

Most of the excavation work to do repairs to the City Sewer Collection System is done by subcontractors. All subcontractors that do work for the City will:

- Obtain a traffic control plan and an erosion control and good housekeeping plan.
- Back fill and restore surface
- Clean up
 - Remove extra material
 - Sweep work area
- Disposal of excavated material
 - Concrete and asphalt are hauled to a recycling facility
 - Clean fill dirt is hauled to projects that are taking this type of material.

CCTV Inspections SOPs

The purpose of Televising the sewer collection systems is to inspect for leaks, infiltration, blockages, pipe condition, illicit discharges and/or cross connections.

- High priority areas are inspected with the use of CCTV equipment more frequently to prevent SSOs . These areas are identified during CCTV inspections are then monitored.
- The following areas will be given priority;
 - Areas with older infrastructure
 - Industrial and commercial areas
 - Areas with history of SSOs
- CCTV equipment, hoses and pipes are rinsed inside the MH.
- Other equipment cleaning is done at the shop

IV. Inspections

Personnel from the Sewer Department will conduct inspections of the assigned areas and document with the appropriate report. Inspection reports and maintenance logs are kept on file in the vault at 2525 Mousette Lane, Cahokia Heights, IL.

- Sewer Pump Stations
 - As part of the weekly visit to check on the operation of the facility, regular housekeeping is done, no report will be filled out.

V. Employee Training

All of the Sewer Collection employees will receive training regarding this O&M Manual at least annually. The training will cover the following subjects:

- Impacts associated with illicit discharges;
- Proper storage of materials;
- Proper disposal and management of wastes;
- Proper management and use of equipment;
- Proper maintenance of indoor and outdoor working areas including parking lot surfaces.

[illegible]

[illegible]

City of Cahokia Heights

OPERATION AND MAINTENANCE PROGRAM Sewer

INTRODUCTION

This summarizes the operation and maintenance programs maintained by the City of Cahokia Heights to ensure performance and reliability of the wastewater collection system. The City maintains and services approximately 4 miles of force main, 90 miles of gravity sewer main, and 69 lift stations. This includes a breakdown of the responsibility and authority, normal system operation, routine preventative maintenance criteria, current staffing organization and needs, new construction, records, safety and emergency response procedures.

There are two primary objectives of this Program. The first objective is to provide documentation of satisfactory wastewater management operations. This objective includes a description of the staff organization, existing facilities and their normal operation, as well as safety procedures and an emergency response plan. A more detailed Operations and Maintenance Program has been prepared in a separate document entitled "CMOM" dated February 2022 prepared by Hurst-Rosche Engineers.

WASTEWATER SYSTEM ORGANIZATION

The Water & Sewer Department is governed by the Mayor and a seven member Board of Alderman. The Director of Water & Sewer oversees the daily operations of the department. The Director is Dennis Traiteur.

The Departments Operations Facility is located at 2525 Mousette Lane, Cahokia Heights, IL.

The Mayor and Board of Alderman set the general policies for the operation of the District. As of July 14, 2022, the City employs a field staff of 8 and an office and administrative staff of 8. The City also retains a licensed professional engineering firm.

The Operation and Maintenance staff is a collectively pooled work group consisting of staff charged with water and sewer maintenance duties. Routine wastewater utility work and assignments include, at a minimum, the following tasks:

- Side sewer maintenance replacement and repair
 - Sewer gravity main maintenance, inspections and repair
 - Wet well maintenance and repair
 - Lift station maintenance and repair
 - Gravity manhole inspection and repair
 - Plan review and project punch list preparation
-

- Plan review and project punch list preparation

OPERATOR CERTIFICATION

There are currently no Illinois State certification requirements for wastewater collection system operators. Collection crew employees are expected to have a mechanical aptitude, with experience with pipelines and pumps and their controls preferred. The City does encourage participation in a program of collection system certification. The District currently has 4 employees that have are seeking class 4 certification as a Collection System Maintenance Operator.

PROFESSIONAL GROWTH REQUIREMENTS

Operator training is an important component in maintaining a safe and reliable wastewater collection system. At a minimum, all personnel performing wastewater system related duties receive training in the following areas:

- Confined space
 - Trenching and shoring
 - Traffic flagging
 - First Aid/CPR/blood borne pathogens
 - Electrical safety training
-

ROUTINE AND PREVENTATIVE MAINTENANCE PROGRAM

Planning for present and future maintenance of the wastewater system facilities is as important as planning gravity sewer main extensions, lift stations, force mains, and other physical improvements. The maintenance effort must be continuous in order for the City to continue to fulfill its role as a wastewater collector in the future.

The role of maintenance is to preserve the value of the physical infrastructure and ensure that the District can continue to provide a safe and reliable wastewater collection system. The most cost-effective method for maintaining a wastewater collection system is to provide a planned preventative maintenance (PM) program. Through a planned PM program, the optimum level of maintenance activities can be provided for the least total maintenance cost.

The Department's PM program involves defining the tasks to be performed, scheduling the frequency of each task, and providing necessary staff to perform the task. For large and complex wastewater collection systems, the administration, scheduling, and record keeping generated by the PM program may be the greatest challenge.

LIFT STATION-MAINTENANCE

The City visits each lift station on a daily basis. Lift stations are inspected every other day. Lift stations are cleaned annually or as needed and their wet wells are vacuumed out as needed.

FORCE MAINS

The City has a goal to exercise force main valves on an annual basis. The City's force mains are designed to achieve scouring velocities that self-clean under normal

system operations and therefore require no maintenance. Air and vacuum relief assemblies may be located at the high points in the force mains. These assemblies are checked annually or as needed to ensure proper operation. Failure of the assembly may cause an air blockage in the force main, which can reduce or prevent flow through the force main and damage lift station pumps.

MANHOLES AND GRAVITY SEWER LINES

The District's manholes are inspected and gravity lines jetted once every 3 years. In some cases segments of pipe have been identified to receive more frequent inspection and jetting.

EMERGENCY RESPONSE PROGRAM

Wastewater utilities have the responsibility to provide collection of wastewater in a reliable manner at all times. Therefore, utilities must reduce or eliminate the effects of natural disasters, accidents, and intentional acts.

EMERGENCY PROCEDURES

Though it is not possible to anticipate all potential disasters affecting the City's wastewater system, formulating procedures to manage and remedy several common emergencies is appropriate. The City has completed a Vulnerability Assessment and Emergency Response Plan (VA/ERP) and updates it as appropriate. An update will be completed in 2027.

Power Failure

Various types of weather can cause loss of power, such as wind, lightning, freezing rain, heavy rain fall and snowstorms. Power may also be lost through traffic accidents. The City's lift stations do not have auxiliary power). Should power be interrupted, Ameren Illinois will be contacted to determine the estimated length of the power outage. If an extended power outage is anticipated, City's work crews report to check sites for problems and monitor levels.

Severe Earthquake

A severe earthquake may not only have a substantial impact on the District's wastewater system but also the adjacent purveyors, including the City St Louis and American Bottoms wastewater treatment facilities. Table 7-2 presents potential effects of a severe earthquake on the wastewater system components.

TABLE 7-2

Emergency Response Procedures for an Earthquake

Wastewater System Component	Potential Effects	Recommended Actions
Lift Stations	Station surcharge and backup into residential side sewers	Dispatch pump trucks and portable generator trucks as necessary.
Force Mains	Broken force main	Dispatch pump truck and repair crew
Gravity Sewer and Manholes	Broken sewer pipe or manhole	Dispatch pump truck and repair crew

SAFETY PROCEDURES

Work place hazards for this system are primarily limited to confined space entry, electrical equipment, health hazards associated with sewage, and traffic hazards associated with doing work in the right of way. Staff is trained as to proper entry into confined spaces such as below grade equipment vaults and wet wells. Staff uses Warning Lights of Southern Illinois for traffic control, and to ensure job safety.

CUSTOMER RESPONSE

The District maintains a log of public communications with respect to the wastewater system. Depending on the nature of the issue, a staff member may be contacted to confirm if a public health issue is apparent. If the issue does not require immediate attention, a work order will be completed and staff will respond as soon as feasible.

Operation & Maintenance Tasks

Daily Tasks

- Check water meter readings and record water distribution
- Check chemical solution tanks and record amounts used (As needed when boosting)
- Check and record water levels in storage tanks.
- Inspect chemical feed pumps.
- Check and record chlorine residual at the point of entry to system.
- Check and record chlorine residual in the distribution system.
- Inspect booster pump stations.
- Check instrumentation for proper signal input/output.
- Investigate customer complaints. Record threats or suspicious activity.
- Complete a daily security check.
- Inspect heater operation during winter months.
- Inspect pumps, motors, and controls.

Weekly Tasks

- Inspect chlorine and fluoride testing equipment.
- Clean pump house and grounds. Make sure fire hydrants (if any) are accessible.
- Record pumping rate for source water pump.
- Conduct weekly security check.

Monthly Tasks

- Take appropriate monthly water quality samples.
- Read all customer meters and compare against total water produced for the month.
- Lubricate locks.
- Check on-site readings against lab results.
- Confirm submittal of monthly reports.

Annual Tasks

- Overhaul chemical feed pumps, such as O-rings, check valves, and diaphragms. (January each year)
- Inspect and clean chemical feed lines and solution tanks. (January each year)
- Calibrate chemical feed pumps after overhaul. (January each year)
- Begin Safety Equipment Repair Log. Maintain log continuously throughout the year. (January each year)
- Operate all valves inside the pump house. Maintain log continuously throughout the year. (January each year)
- Review emergency response plans. (January each year)
- Inspect chemical safety equipment and repair or replace as needed. (February each year)
- Operate all valves inside the pump house. (February each year)
- Inspect, clean, and repair control panels in pump house (March each year)
- Exercise all mainline valves. (April each year)
- Inspect and clean chemical feed lines and solution tanks. (May each year)
- Calibrate chemical feed pumps. (April each year)
- Inspect storage tanks for defects and sanitary deficiencies. (May each year)
- Clean storage tanks if necessary. (May each year)
- Flush the distribution system and exercise/check all fire hydrant valves (June each year)
- Perform preventive maintenance on pump house buildings. (May each year)
- Inspect and clean chemical feed lines and solution tanks. (May each year)
- Calibrate chemical feed pumps. (May each year)
- Prepare a demand forecast. Identify and evaluate energy conservation measures. Identify and evaluate distribution system leaks. Establish/update water loss mitigation program. (July each year)
- Operate all valves inside the pump house. (May each year)
- Prepare system for winter operation. (October each year)
- Inspect and clean chemical feed lines and solution tanks. (June each year)
- Calibrate chemical feed pumps. (June each year)
- Prepare system for winter operation if not completed in October. (in November)
- Contact an electrician to check running amps on pumps. (first Monday in December)

City of Cahokia Heights O & M Check List

- Map of all source/intakes and raw water transmission lines.
- Map of current finished water distribution system
- Inventory List of property, service lines, equipment, tools and instruments; include manufacturer, model, serial number, and condition
- Locations of spare parts (including pumps and backup power source) and vendor contact information or repair service used
- O&M technical manuals for equipment and water system facilities
- Lists of daily, weekly, monthly, quarterly, and/or annual maintenance tasks to be performed. Log sheets for recording maintenance performed.
- Location of first-aid instructions and supplies.
- Contact names, telephone/fax numbers and email addresses for:
 - System operators
 - Local government officials;
 - EPA
 - Office/ Directors;
 - State/County Public Health
 - Certified laboratories used, with identification for each type of sample analyzed; and
 - Local responders (law enforcement, fire, hazmat)
 - Experienced operators at nearby systems who can serve as backup or provide help in an emergency.
- Monitoring Plan: Current Year EPA monitoring requirements, location of sampling or monitoring sites, sampling/reporting forms, and instructions for reporting and recordkeeping.
- Location of sampling and monitoring records
- Location of other formal communications from/to EPA and others on the contact list above
- Locations of spare sample bottles, sampling technique information; monitoring plans
- Instructions when notified by lab of RTCR/fecal positive sample
- Location of public notice forms and instructions
- Instructions for pressure loss in system (flow chart)
- Instructions for flushing and shock chlorinating tanks, distribution system mains, etc.
- Location of secured instructions for maintaining security in your system.
- Take-Away Emergency Response Plan: (1) Flow charts for operators to handle specific problems (main breaks) (2) Names and phone/fax numbers of state and local responders (police, fire, county, etc.) (3) Names/numbers of county and state agencies to call if waterborne disease outbreak or other health emergency.

Appendix N

Grease Control Program

Ordinance For The City of Cahokia Heights for Grease Control, Fats and Oils

This ordinance is to provide a Grease Control Program and educational information for both commercial and residential users.

A. Scope and Purpose

To aid in the prevention of sanitary sewer blockages and obstructions from contribution and accumulation of fats, oils, and greases into such sewer system from residential users, industrial or commercial establishments, particularly food preparation and serving facilities.

B. Definitions

1. Fats, Oils, and Greases. Organic polar compounds derived from animal and/or plant sources that contain multiple carbon chain triglyceride molecules. These substances are detectable and measurable using analytical test procedures established in 40 CFR 136, and may be amended from time to time. All are sometimes referred to herein as "Grease" or "Greases."

2. Grease Trap or Interceptor. A device for separating and retaining waterborne Greases and Grease complexes prior to the wastewater exiting the trap and entering the sanitary sewer collection system. These devices also serve to collect settleable solids, generated by and from food preparation activities, prior to the water exiting the trap and entering the sanitary sewer collection and treatment system. Grease Traps and Interceptors are sometimes referred to herein as "Grease Interceptors".

3. Cooking Establishments. Those establishments primarily engaged in activities of preparing, serving, or otherwise making available for consumption foodstuffs and that use one or more of the following preparation activities: cooking by frying (all methods), baking (all methods), grilling, sautéing, rotisserie cooking, broiling (all methods), boiling, blanching, roasting, toasting, or poaching. Also included are infrared heating, searing, barbecuing, and any other food preparation activity that produces a hot, nondrinkable food product in or on a receptacle that requires washing.

4. Non-Cooking Establishments. Those establishments primarily engaged in the preparation of precooked foodstuffs that do not include any form of cooking. These include cold dairy and frozen foodstuffs preparation and serving establishments.

5. Minimum Design Capability. The design features of a Grease Interceptor and its ability or volume required to effectively intercept and retain Greases from grease laden wastewaters discharged to the public sanitary sewer.

6. User. Any person, including those located outside the jurisdictional limits of the City, who contributes, causes or permits the contribution or discharge of wastewater into the POTW, including persons who contribute such wastewater from mobile sources, such as those who discharge hauled wastewater.

C. Grease Interceptor Maintenance, Record Keeping, and Grease Removal

1. Grease Interceptors shall be installed by Users as required by the Director or his designee. Grease Interceptors shall be installed at the User's expense, when such User operates a Cooking Establishment. Grease Interceptors may also be required in noncooking or cold dairy and frozen foodstuffs establishments and other industrial or commercial establishments when they are deemed necessary by the Director for the proper handling of liquid wastes containing Grease. No User shall allow wastewater discharge concentration from subject Grease Interceptor to exceed 325 milligrams per liter, as identified by method EPA Method 1664 or 275 milligrams per liter, as identified by EPA method 413. All Grease Interceptors shall be of a type, design, and capacity approved by the Director or his designee and shall be readily and easily accessible for User cleaning and Town inspection. All such Grease Interceptors shall be serviced and emptied of accumulated waste content as required in order to maintain Minimum Design Capability or effective volume of the Grease Interceptor, but not less often than every thirty (30) days. Users who are required to pass water through a Grease Interceptor shall:

- a. Provide for a minimum hydraulic retention time of twenty-four (24) minutes at actual peak flow or 12 minutes at the calculated theoretical peak flow rate as predicted by the Uniform Plumbing Code fixture criteria, between the influent and effluent baffles with twenty (20) percent of the total volume of the Grease Interceptor being allowed for sludge to settle and accumulate, identified hereafter as a "sludge pocket".
- b. Remove any accumulated Grease cap and sludge pocket as required, but at intervals of not longer than thirty (30) days at the Users expense. Grease Interceptors shall be kept free of inorganic solid materials such as grit, rocks, gravel, sand, eating utensils, cigarettes, shells, towels, rags, etc., which could settle into this pocket and thereby reduce the effective volume of the Grease Interceptor.
- c. Accept the following conditions: If any skimmed or pumped wastes or other materials removed from Grease Interceptor are treated in any fashion onsite and reintroduced back into the Grease Interceptor as an activity of and after said onsite treatment, the User shall be responsible for the attainment of established Grease numerical limit consistent with and contained in (C)(1) on all discharges of wastewater from said Grease Interceptor into the City of Cahokia Height's sanitary sewer collection and treatment system.
- d. Operate the Grease Interceptor in a manner so as to maintain said device such that attainment of the grease limit is consistently achieved. "Consistent" shall mean any wastewater sample taken from said Grease Interceptor shall be subject to terms of numerical limit attainment described in (C)(1). If an establishment desires, because of documented space constraints, an alternate to an out-of-building Grease Interceptor, the request for an alternative location shall contain the following information:
 - i. Location of City sewer main and easement in relation to available exterior space outside building
 - ii. Existing plumbing at or in a site that uses common plumbing for all services at that site.

- e. Understand and agree that: The use of biological additives as a Grease degradation agent is conditionally permissible, upon prior written approval by the Director. Any establishment using this method of Grease abatement shall maintain the trap or interceptor in such a manner that attainment of the Grease wastewater discharge limit, as measured from the trap's outlet, is consistently achieved.
 - f. Understand and agree that: The use of automatic Grease removal systems is conditionally permissible, upon prior written approval by the Director. Any establishment using this equipment shall operate the system in such a manner that attainment of the Grease wastewater discharge limit, as measured from the unit's outlet, is consistently achieved.
 - g. Understand and agree that: The Director reserves the right to make determinations of Grease Interceptor adequacy and need, based on review of all relevant information regarding Grease Interceptor performance, facility site and building plan review and to require repairs to, or modification or replacement of such traps.
2. The User shall maintain a written record of trap maintenance for three (3) years. All such records will be available for inspection by the City.
3. No non-grease laden sources are allowed to be connected to sewer lines intended for Grease Interceptor service.
4. Except as provided herein, for a period of one year following adoption of this Ordinance, although installation of Grease Interceptors will be required to be installed, no enforcement actions will be taken under this Ordinance for failure to achieve limits on Grease discharges from Grease Interceptors. If, during this one year period an obstruction of a City sewer" main(s) occurs that causes a sewer overflow to the extent that an impact on the environment is realized and that said overflow or failure of the sanitary sewer collection system to convey sewage can be attributed in part or in whole to an accumulation of grease in the City's sewer main(s), the City of Cahokia Heights will take appropriate enforcement actions, as stipulated in the City's Industrial Pretreatment Enforcement Plan and Sewer Use Ordinance, against the generator or contributor of such grease.
5. Access manholes, with a minimum diameter of 24 inches, shall be provided over each chamber and sanitary tee. The access manholes shall extend at least to finished grade and be designed and maintained to prevent water inflow or infiltration. The manholes shall also have readily removable covers to facilitate inspection, Grease removal, and wastewater sampling activities.

This Ordinance was adopted by the City of Cahokia Heights Board of Aldermen on the

_____ day of _____, 20_____.

City of Cahokia Heights
GREASE TRAP INSPECTION REPORT

The purpose of this checklist is to offer a general format to follow during inspections. All grease traps must be inspected and listed on this form. Return this form with the annual reporting form.

Facility Name/Address:
Telephone number:

Is there a Grease Trap/Interceptor inside the building? Yes _____ No _____
 Location _____ Size _____
 Condition (structural) _____ (operational) _____
 Observations/Comments: _____

How many Grease Traps are there? (Circle one) 1 2 3 4

Tank Number:	
Describe Tank Location:	
Comments:	
Size of tank	gallons How was it determined?
Baffle? ☐ No ☐ Yes - If yes, can all compartments be cleaned? ☐ No ☐ Yes	
Inlet Pipe: Visible? ☐ No ☐ Yes	Depth: ft. Condition:
Outlet Pipe: Visible? ☐ No ☐ Yes - Depth: ft. Condition:	
What method are you using? ☐ clear plastic pipe ☐ measuring stick H other	
*Depth from Bottom of Outlet Pipe to Bottom of Tank:	ft. (A)
*Thickness of Floating Grease Blanket at Top of Liquid Surface:	ft. (B)
*Thickness of Settled Material on Bottom of Tank (if measurable):	ft. (C)
*Depth from Bottom of Outlet Tee to Bottom of Tank:	ft. (D)
Is (B) above greater than 25% of (A) above? ☐ Yes ☐ No	
Is (C) above greater than 25% of (D) above? ☐ Yes ☐ No	
If either condition is marked "Yes", the grease trap requires maintenance.	
Indicate the date the grease trap is cleaned. Date Cleaned: Initial:	
Facility Representative	Date Inspected

City of Cahokia Heights Water & Sewer Dept.

2525 Mousette Lane, Cahokia Heights, IL.

618-332-1222

ANNUAL GREASE/SAND TRAP MAINTENANCE REPORT

Please use one form for each trap

BUSINESS OWNER		OWNER'S PHONE	
BUSINESS OWNER ADDRESS			
MANAGER		MANAGER'S PHONE	
BUSINESS NAME			
BUSINESS ADDRESS OF GREASE/SAND TRAP			
TRAP MANUFACTURER			
PLEASE CHECK BELOW:			
☐	TRAP ABOVE FLOOR INSIDE BLDG	☐	TRAP BELOW FLOOR INSIDE BLDG
☐	TRAP ABOVE GROUND OUTSIDE	☐	TRAP BELOW GROUND OUTSIDE
☐	PROPER LOCK & COVER ON OUTSIDE BELOW GRADE GREASE TRAP		
TRAP SIZE (GALLONS)			
TRAP DIMENSIONS	WIDTH	LENGTH	DEPTH
LOCATION IN BLDG OF INTERIOR TRAP			

PROVIDE A DRAWING ON THE BACK OF THIS PAGE OF EXTERIOR TRAP LOCATION IN REFERENCE TO BUILDINGS, DRIVEWAY, PARKING LOT. PLEASE INDICATE NORTH WITH AN ARROW.

I HAVE MAINTAINED THE ABOVE TRAP AS REQUIRED BY CITY OF CAHOKIA HEIGHTS ORDINANCE #

AS FOLLOWS: All sand and grease traps shall be maintained by the owner at their expense in continuing and efficient operation at all times. The owner shall be responsible for the proper removal and disposal of captured material by appropriate means. Wastes removed from sand and grease traps shall not be discharged into the sanitary sewer. The owner shall maintain records of all maintenance. The use of grease emulsifiers and/or hot water cleaning is prohibited. Maintenance reports detailing all maintenance performed during the previous year shall be submitted to Water & Sewer Dept. annually.

Any questions, please call Water & Sewer at (618) 332-1222.

DATES TRAP WAS CLEANED/SERVICED, OR ATTACH SEPARATE PAGE OR RECEIPTS FOR SERVICE WORK:

SIGNATURE: _____ **PRINT NAME:** _____

DATE: _____