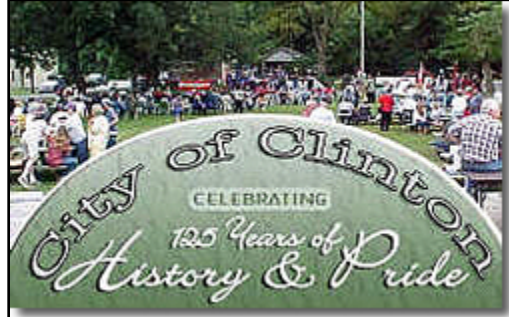


# **SANITARY SEWER OVERFLOW RESPONSE PLAN**

**CITY OF CLINTON WATER AND SEWER DEPARTMENT**



**NPDES Permit No. AR0048836  
AFIN 71-0018**

**PREPARED FOR:**

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# **CITY OF CLINTON WATER AND SEWER SYSTEM SANITARY SEWER OVERFLOW RESPONSE PLAN**

## ***I. BACKGROUND INFORMATION***

The City of Clinton Water and Sewer Department received a letter from the Arkansas Department of Environmental Quality (ADEQ) dated March 12, 2018 requesting a Corrective Action Plan (CAP) and a Sanitary Sewer Overflow Response Plan (SSORP).

## ***II. NPDES PERMIT***

**National Pollutant Discharge Elimination System (“NPDES”)  
NPDES Permit # AR000048836  
AFIN 71-0018**

## ***III. GENERAL***

The Sanitary Sewer Overflow Response Plan (SSORP) is designed to ensure every report of a confirmed sewage overflow is immediately dispatched to the appropriate crew to take corrective measures to minimize the impact to public health, beneficial use, quality of surface waters, and customer service. The SSORP further includes provisions to ensure safety pursuant to the directions provided by the ADEQ and notification/reporting is made to the appropriate local, state, and federal authorities. For purposes of this SSORP, “confirmed sewage spill” is also sometimes referred to as “sewer overflow,” “overflow,” or sanitary sewer overflow “SSO”. .

### **A. Objectives**

The objectives of the SSORP are as follows:

- Protect public health and the environment
- Comply with regulatory agencies and waste discharge permit conditions
- Minimize risk of enforcement actions against City of Clinton Water and Sewer.
- Provide appropriate customer service
- Protect wastewater treatment plant and collection system personnel
- Protect the collection system, wastewater treatment facilities, and all appurtenances
- Protect private and public property beyond the collection and treatment facilities.

### **B. SSO Tracking**

A spreadsheet listing assets which have overflowed due to wet or dry weather conditions is maintained and updated annually.

## ***IV. SSO MONITORING AND TRACKING***

The procedure to track the frequency and location of SSOs will be as defined below:

- A. All SSOs will be tracked in the City of Clinton Water and Sewer Overflow database.
- B. SSOs will be defined as Wet-Weather: (SOW = Sewer Overflow Wet-Weather), Dry-Weather: (SOD = Sewer Overflow Dry-Weather), or Private: (SOP = Sewer Overflow Private). The definition of a dry-weather overflow is an overflow due to an obstruction in the main line or equipment failures. The definition of a wet-weather overflow is an overflow resulting from insufficient carrying capacity to convey inflow and/or infiltration during a storm event. The definition of a private overflow is one that occurs prior to reaching the public sewer main, such as an overflow from a cleanout cap. Clinton Water and Sewer will maintain and update a list of SSOs.
- C. The database will include the manhole number to identify the overflow locations.
- D. The SSO database will contain all information required for regulatory reporting. Reports generated from the database will have the capability of pulling SSO locations based upon dates, locations, and number of occurrences annually.

#### ***V. STANDARD OPERATING PROCEDURE***

The standard operating procedure is for City of Clinton Water and Sewer Personnel to follow after an SSO is documented.

##### **A. Receipt of Information Regarding an SSO**

An SSO may be reported by residents, employees, or anyone that has witnessed an SSO. All Clinton Water and Sewer employees receiving SSO notification shall report the SSO to the designated supervisor. Generally, CSR receive telephone calls from the public reporting possible SSOs. However, a telephone call received after hours will be directed to the 24-hour emergency phone line. A phone call of this type will be received by the After Hours Emergency Crew, which will be the Response Crew.

- 1. The administration records all relevant information available regarding the possible overflow including:
  - a. Time and date call was received;
  - b. Specific location;
  - c. Description of problem;
  - d. Time and date overflow was observed;
  - e. Caller's name and phone number;
  - f. Observations of the caller (e.g., odor, duration, back, or front of property); and
  - g. Other relevant information that will enable the responding crews to quickly locate, assess and analyze the SSO.

The Construction Coordinator then records the SSO information and creates a service request for assignment to the proper Response Crew.

2. Pump station failures are monitored and received by operators on duty at the Wastewater Treatment Plant. The operator on duty immediately conveys all information regarding alarms to the Operations Manager to initiate the investigation. The Investigating Crew determines if failure resulted in an overflow and reports to administration.
3. SSOs detected by any personnel in the course of their normal duties are reported immediately to the Construction Coordinator who records all relevant SSO information and dispatches a crew and additional response crews, as needed.
4. Response crew confirms the SSO. Until verified, the report of a possible spill will not be referred to as a “sewer overflow.”

If an overflow has occurred, the crew records the following information for the administration. Figure V-1 is the form to be utilized in recording the appropriate information.



B. Overflow Correction, Containment, and Clean-Up

SSOs of various volumes occur from time to time in spite of concerted prevention efforts. Spills may result from blocked sewer lines, pipe failures, or mechanical malfunctions among other natural or man-made causes.

The objectives of these actions are:

- To protect public health, environment and property from sewage overflows and restore surrounding area back to normal as soon as possible;
- To promptly notify the regulatory agency's communication center of preliminary overflow information and potential impacts;
- To contain the SSO to the maximum extent possible including preventing the discharge of sewage into surface waters; and
- To minimize the City of Clinton Water and Sewer exposure to any regulatory agency penalties and fines.

Under most circumstances, City of Clinton Water and Sewer handles all response actions with its own maintenance forces. They have the skills and experience to respond rapidly and in the most appropriate manner. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system.

Circumstances may arise when the City of Clinton Water and Sewer could benefit from the support of private-sector construction assistance. This is especially true in the case of large diameter pipes buried to depths requiring sheet piling and dewatering. City of Clinton Water and Sewer may also choose to use private contractors for open excavation operations that might exceed one day to complete.

1. Responsibilities of Response Crew Upon Arrival

It is the responsibility of the first personnel who arrive at the site of an SSO to protect the health and safety of the public by mitigating the impact of the SSO to the extent possible. If the SSO is discovered to be a private overflow and not the responsibility of City of Clinton Water and Sewer, the Response Crew will notify the resident of the situation and recommend they contact a private plumber to mitigate the problem. City of Clinton Water and Sewer will dispatch a Plumbing Inspector to inspect and monitor the site to insure the resident has taken the appropriate action to correct the problem. Upon arrival at an SSO, the response crew (the below items may not apply to Sanitary Overflow Wet "SOW's"):

- Determines the cause of the overflow: sewer line blockage, pump station mechanical or electrical failure, sewer line break, etc.;
- Identifies and requests, if necessary, assistance or additional resources to correct the overflow or to assist in the determination of its cause;
- Takes immediate steps to stop the overflow, e.g. relieves pipeline blockage, manually operates pump station controls, etc. Extraordinary steps may be considered where overflows from private property threaten public health and safety (e.g., an overflow running off of private property into the public right-of-way); and

- Requests additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the SSO.
2. Initial Measures for Containment  
The crew shall initiate measures to contain and/or recover the overflowing sewage in order to minimize the impact to public health or the environment.
  3. Additional Measures - Prolonged Overflow Conditions  
In the event of a prolonged sewer line blockage or a sewer line collapse, it may be necessary to set up a portable bypass pumping operation around the obstruction.
  4. Cleanup  
SSO sites are to be thoroughly cleaned after an overflow. No readily identified residue (e.g., sewage solids, papers, rags, plastics, rubber products) is to remain. The site shall be treated with approved material after cleanup is completed.
- C. Overflow Report  
Response crew uses the application Form for all recording.. The Response crew will notify the Construction Coordinator when the SSO has stopped overflowing.
- D. Customer Satisfaction  
When a SSO is reported by a citizen, the Construction Coordinator will then contact the reporting citizen and discuss the actions taken and the resolution of the problem.

## **VI. SSO RESPONSE PLAN SUMMARY**

### *Public Notification of possible SSO*

#### **Notification during working hours**

Customer Service Representatives (CSR) receive notification of a possible SSO from the public. The CSR will route the call to the Construction Coordinator at which time all relevant information is collected, as outlined in Section IV-A. CONSTRUCTION COORDINATOR will then dispatch the appropriate Response Crew to the site to verify if an SSO has occurred. The Response Crew will report findings back to CONSTRUCTION COORDINATOR.

Response Crew determines if SSO has occurred and attempts to resolve problem. Response Crew uses their tables to complete the application electronically. They then take photographs before clean-up is started, and places warning sign(s) at the site, as required. Construction Supervisor verifies Overflow Report, problem resolution, and signage have been appropriately addressed.

On all public overflows, Response Crew begins cleanup and disinfection of the affected area. The Construction Supervisor will verify cleanup is completed, take photographs and remove warning signs.

All private overflow calls are directed directly to the field crews. The customer is then directed to contact their individual insurance carrier for coverage and is encouraged to work with insurance company to complete cleanup. Because of the nature of a private overflow, Clinton Water and Sewer recommends the

use of a professional restoration service to complete the cleanup. Clinton Water and Sewer employees are not allowed to work inside private/commercial addresses.

***Official Notification of SSO after working hours***

After Hours Emergency Crew receives direct notification of possible SSO from public at which time they collect all relevant information as outlined in Section IV-A and proceed to location. (After Hours Emergency Crew emergency phone after business hours)

Emergency crew determines if SSO has occurred and attempts to resolve problem then takes photographs before cleanup and places warning signs at site, as required. Emergency Crew uses tablet application and a report is generated electronically to the administrative staff.

On all public overflows, Emergency Crew then begins clean-up and disinfection of the affected area. When cleanup is completed, crew is to take photographs and remove warning signs. Site visit is to be performed the first work day after the overflow occurrence.

All private overflow calls are directed to the field crews. The customer is then directed to contact personal insurance for coverage and restorations service for cleanup. Clinton Water and Sewer employees are not allowed to work inside private/commercial addresses.

***Internal Notification of possible SSO***

All Clinton Water and Sewer personnel are directed to immediately report any potential overflow and provide all relevant information as outlined in Section IV-A. After the overflow has been reported, all procedures will be the same as with a public notification of possible SSO above.

Rain events that are one-inch or greater will trigger our Response Crews to investigate possible recurring SSO sites to verify if an overflow has occurred. These crews will be furnished a list of possible SSO sites (see appendix E), which has been determined as being locations that have potential to overflow. After crews have completed a check of the entire list, they will begin clean-up at each site. Appendix 21 is a map showing the recorded overflow locations.

Table 1). After crews have completed a check of the entire list, they will begin clean-up at each site.

***VII. PUBLIC ADVISORY PROCEDURE***

This section describes the appropriate actions of City of Clinton Water and Sewer, in cooperation with ADEQ and the Arkansas Department of Health to limit public access to areas potentially impacted by unpermitted discharges of pollutants to surface water bodies from the wastewater collection system. Temporary and permanent public notice will be provided as indicated below. The following is an example of a public notice.

The following language shall be used on signs located on existing SSO sites during cleanup and on notices attached to homes adjacent to SSO sites:

**NOTICE OF  
SANITARY SEWER OVERFLOW  
*Please avoid contact with this  
sanitary sewer facility due to the  
possibility of adverse health effects***



***until cleanup can be completed.***

A. Temporary Public Notice

City of Clinton Water and Sewer has primary responsibility for determining when to post notices of polluted surface water bodies or ground surfaces that result from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas, unless posted otherwise, but provide a warning of potential public health risks due to sewage contamination.

B. Other Public Notification

If the General Manager determines additional public notification is needed, the administration will make said notifications under the General Manager's direction.

***IIX. REGULATORY AGENCY NOTIFICATION PLAN***

The Regulatory Agency Notification Plan establishes procedures that City of Clinton Water and Sewer follows to provide formal notice to ADEQ as necessary in the event of SSOs. The reporting criteria below explains to whom various forms of notification should be made, and lists agencies/individuals to be contacted.

Agency notifications will be performed in parallel with other internal notifications. The procedures for notifying the media of an SSO is presented in Section VII - Media Notification Procedure. Internal notification and mobilization of personnel are detailed in Section IV - Overflow Response Procedure.

A. Immediate Notification

Upon data entry of a SSO event, the administration will make the proper notifications as detailed in the following section. For reference, the applicable NPDES Permit reporting requirements are reprinted below.

“The permittee shall report all overflows with the Discharge Monitoring Report (DMR) submittal. These reports shall be summarized and reported in tabular format. The summaries shall include: The date, time, duration, location, estimated volume, and cause of overflow; observed environmental impacts from the overflow; action taken to address the overflow; and ultimate discharge location if not contained (e.g. storm sewer system, ditch, tributary). Overflows, which endanger health or the environment, shall be orally reported to this department (Enforcement Section of Water Division) within 24 hours from the time the permittee becomes aware of the circumstance. A written report of overflows which endanger health or the environment, shall be provided within 5 days of the time the permittee becomes aware of the circumstance.”

The administration is responsible for meeting the 24-hour oral or fax notification requirement. The name, mailing address, e-mail address, telephone and fax number for 24-hour reporting to ADEQ is provided below:

ADEQ – Water Enforcement  
P.O. Box 8913  
Little Rock, Arkansas 72219-8913  
Telephone: (501) 682-0639  
Fax: (501) 682-0910  
Email: [WaterEnfSSO@adeq.state.ar.us](mailto:WaterEnfSSO@adeq.state.ar.us)

**B. Secondary Notifications**

After those parties identified in *Section A. Immediate Notification* have been contacted, the administration will notify other federal, state, and local agencies, as well as other interested and possibly impacted parties as directed by the General Manager.

**IX. MEDIA NOTIFICATION PROCEDURE**

When an SSO has been confirmed and is a threat to public health, take the following actions, if necessary, to notify the media:

- A. Response Crew verifies overflow and reports back to the administration.
- B. The administration informs the General Manager. The primary contact should be the General Manager.
- C. All media requests received should be referred immediately to the General Manager.
- D. The following personnel are authorized to be interviewed by the media and are the designated spokespersons: General Manager or Interim General Manager

**X. DISTRIBUTION AND MAINTENANCE OF SSORP**

Annual updates to the SSORP reflect all changes in policies and procedures as may be required to achieve its objectives.

- A. Submittal and Availability of SSORP, Distribute copies of the SSORP and any amendments to personnel involved in the I/I program.
- B. Review and Update of SSORP, Review the SSORP annually and amend as appropriate
- C. Practical Resources, There will be small laminated pocket guides printed and furnished to all employees that are involved with the SSO Response Plan, which will provide an overview of the of procedures as well as essential phone numbers.
- D. Training, A copy of the SSO Response Plan will be distributed to all employees involved in the Overflow process. A review of the plan will be conducted with each employee in a group setting or individually as determined by the employee's supervisor. This training should take place annually or when revisions occur, so that all personnel are brought up to date of any changes that may occur. Each division should also review their response efforts at these annual training sessions and take suggestions to revise procedures. These suggestions will then be submitted to all divisions for review to determine if revisions are required.

**XI. SSO FLOW AND VOLUME DETERMINATION**

As indicated previously in this SSORP, each SSO actively discharging shall be evaluated for flow and ultimately total volume discharged, each of which is to be included as part of the reporting requirements. Clinton Water and Sewer has included a flow estimating system that is derived from the reaction of the manhole lid in relation to the amount of flow exiting the collection system. This system is easily field estimated without the need for measuring devices, which in most instances provide inadequate data.

The three-category rating system is outlined below:

0 – 10 gpm (gallons per minute)

This rate covers the light discharge experienced in the upper reaches of the collection system, usually with a small number of residential connections. The visual indicator would be a light flow (about the rate of a standard faucet) from around the manhole lid with no visible release of debris or solids, and no movement or lifting of the lid itself.

10 – 100 gpm

This rate covers the moderate discharge experienced in the lower reaches of the collection system, usually along the larger collector or outfall type sewer mains (typically 10” and larger mains) and in some capacity related SSOs. The visual indicator would be a noticeable flow from around the manhole lid, slight debris or solids release, and a rocking or slight lifting of the manhole lid.

Greater than 100 gpm

This rate covers the heavy discharge experienced along the major outfall sewers and larger capacity related SSOs. The visual indicator is the definite release of debris or solids, and the complete lifting or displacement of the manhole lid.

SSO volumes are computed by estimating the flow from the above data and multiplying by the duration of discharge. See Figure XI-1.

**Figure XI-1**



5 gpm



25 gpm



50 gpm



100 gpm



150 gpm



200 gpm



225 gpm



250 gpm



275 gpm