



Public Works
3174 East Van Buren
Eureka Springs, Arkansas 72632

Simon Wiley - Director
Phone: (479) 253-9600
Email: swiley@eurekaspringsar.gov

October 13, 2023

Stacie Wassell, Associate Director, OWQ, DEQ
5301 Northshore Drive
North Little Rock, AR 72118

**RE: NPDES Permit Number: AR0021865, AFIN: 08-00036
Request for Interim Measures, Bacteria Sampling, Communication Plan and
Corrective Action Plan**

Dear Stacie Wassell,

In response to your letter requesting interim measures, bacteria sampling, communication plan, and corrective action dated October 11, 2023, the City of Eureka Springs Public Works Department has developed a Standard Operating Procedure (SOP) that provides instructions to the Wastewater Treatment Plant (WWTP) personnel for responding to Sanitary Sewer Overflows (SSOs). The SOP also includes procedures to notify residents who live downstream of the WWTP and adjacent to the Leatherwood Creek of the potential water quality issues.

Regularly scheduled updates regarding the water quality of Leatherwood Creek will be made available to the public in accordance with the procedures outlined in Exhibit A.

If you have any further questions or concerns, please do not hesitate to contact me at my office.

Sincerely,

Simon Wiley

Cc: Honorable Robert "Butch" Berry – Mayor, City of Eureka Springs
Terry Long – WWTP Manager, City of Eureka Springs
Zane Lewis, P.E. – Project Manager/Engineer, MCE
Terry Paul – Environmental Health Branch Chief, ADH
Lance Jones, P.E. – Director, Engineering Section, ADH
Craig Corder, P.E. – Chief Engineer, Engineering Section, ADH
Bryan Leamons, P.E. – Senior Manager, Permits Branch, Office of Water Quality, DEQ
Jason Bolenbaugh – Compliance Branch Manager, Office of Water Quality, DEQ
Richard Healey – Enforcement Branch Manager, Office of Water Quality, DEQ

EXHIBIT A

STANDARD OPERATING PROCEDURE	
SOP Title:	Standard Operating Procedures for Sanitary Sewer Overflows at the Wastewater Treatment Facility
OBJECTIVE	To provide clear and complete instructions for responding to sanitary sewer overflows (SSOs) at the Wastewater Treatment Plant (WWTP).
BACKGROUND	Between September 12, 2023 and September 20, 2023, the WWTP suffered a variety of issues that resulted in eight (8) SSOs resulting in untreated sanitary sewage to enter Leatherwood Creek.
SAFETY PROCEDURES	Personnel responding to any SSO must wear appropriate personal protective equipment (PPE) to prevent contact with raw sewage. PPE may include: rubber gloves, rubber boots, impermeable coveralls, and protective headwear with splash shield.
POTENTIAL HAZARDS	The City of Eureka Springs WWTP is located at 100 Highway 23 North, Eureka Springs, AR 72632. The effluent leaves the plant directly to Leatherwood Creek which borders the east side of the WWTP. SSO contamination impacts the water quality of an area used for recreational activities.
RESPONSE	<p>Upon notification from remote sensing equipment, notification by SCADA, other staff, or public notification, personnel responding to an SSO may encounter an emergency situation that requires immediate action. The first responders to the site during normal business hours will be the WWTP crew. After hours, On-Call personnel will respond and call for back up personnel as needed.</p> <p>Responding personnel will:</p> <ol style="list-style-type: none"> 1. Determine whether the spill has reached Leatherwood Creek 2. Notify the testing laboratory to acquire testing samples should the spill reach Leatherwood Creek* 3. Post ADH signs at the locations shown in Exhibit A for Sample Sites 2, 3, and 4, should the spill reach Leatherwood Creek 4. Provide a Health Advisory in accordance with Public Notification requirement in this SOP 5. Determine the cause of the problem (blockage, equipment failure, wet weather I&I, etc.) 6. Determine what additional resources may be needed (equipment and materials) 7. Document any necessary information needed for reporting requirements 8. Take photos of the impacted area 9. Estimate the release volume based on size of the sewer, weather conditions, and the extent of the release 10. Report spill in accordance with the Office of Water Quality, DEQ reporting requirements. <p>*Should testing agency not be available for immediate sampling, The City of Eureka Springs WWTP personnel will acquire the required samples and hold them in accordance with testing protocol and provide a chain of custody to the testing laboratory for further handling.</p>

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CONTAINMENT	<p>Containment of an overflow is the responder's first priority. The methods used will vary on a case-by-case basis. The WWTP Manager and maintenance responders will:</p> <ul style="list-style-type: none"> •Identify and obtain the necessary equipment and materials needed to contain the overflow. •Take immediate steps to contain the overflow (block path toward receiving water, recover with physical or mechanical means). •Determine whether additional containment measures are needed.
CORRECTION OF OVERFLOW	<p>The time required to correct the cause of the overflow depends on the determined cause. In the case of the WWTP, the most frequent cause is either a mechanical or electrical failure, or wet weather initiated I&I and the current hydraulic load limitations of the WWTP.</p> <p>Responding crews must begin investigating the WWTP for mechanical or electrical failures. When necessary, contractor services may be requested as an additional resource to abate the overflow.</p>
SAMPLING AND TESTING	<p>Upon response to the spill and validation that the spill is entering Leatherwood Creek, the following sampling and testing will be initiated for <i>E. Coli</i>.</p> <ol style="list-style-type: none"> 1.ADH signs shall be posted, and sampling shall occur at the locations shown on Exhibit A immediately following each SSO. The City of Eureka Springs shall also notate the coordinates of the sample locations on the chain-of-custody forms. 2.Subsequent samples shall be collected every three (3) days at a minimum, for <i>E. Coli</i>. The City of Eureka Springs shall also notate the coordinates of the sample locations on the chain-of-custody forms. 3.Copies of the analytical results and the chain-of-custody forms shall be emailed to the DEQ Office of Water Quality, within two (2) calendar days of sample collection. 4.Continue to monitor and sample every three (3) days until there are two (2) consecutive samples that are below the water quality criteria for <i>E. Coli</i> of 126 cfu/100mL. 5.ADH signs shall be removed upon demonstration of safe bacteriological testing. 6.The City of Eureka Springs shall email all test results to DEQ's Office of Water Quality, Enforcement Branch and water-enforcement-report@adeq.state.ar.us upon receipt from the testing laboratory. 7.Submit emails twice a week to provide updates to SSOADEQ@adeq.state.ar.us on the City's progress towards stopping the unpermitted discharges and impacts to the water quality in Leatherwood Creek in Eureka Springs. Once the unpermitted discharge has ceased, provide an email notification to SSOADEQ@adeq.state.ar.us with photographs confirming the unpermitted discharge has stopped. <p>Testing shall be conducted at an approved Department of Environmental Quality laboratory.</p>

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<p>RECOVERY/CLEAN UP</p>	<p>Upon response to the spill and vandalism that the spill is entering Leatherwood Creek, the following sampling and testing will be initiated for <i>E. Coli</i>.</p> <ol style="list-style-type: none"> 1. ADH signs shall be posted, and sampling shall occur at the locations shown on Exhibit A immediately following each SSO. The City of Eureka Springs shall also notate the coordinates of the sample locations on the chain-of-custody forms. 2. Subsequent samples shall be collected every Monday and Thursday at a minimum, for <i>E. Coli</i>. The City of Eureka Springs shall also notate the coordinates of the sample locations on the chain-of-custody forms. 3. Copies of the analytical results and the chain-of-custody forms shall be emailed to the DEQ Office of Water Quality, within two (2) calendar days of sample collection. 4. Continue to monitor and sample every Monday and Thursday until there are two (2) consecutive samples that are below the water quality criteria for <i>E. Coli</i> of 126 cfu/100mL. 5. ADH signs shall be removed upon demonstration of safe bacteriological testing. 6. The City of Eureka Springs shall email all test results to DEQ's Office of Water Quality, Enforcement Branch and water-enforcement-report@adeq.state.ar.us upon receipt from the testing laboratory. 7. Submit emails twice a week to provide updates to SSOADEQ@adeq.state.ar.us on the City's progress towards stopping the unpermitted discharges and impacts to the water quality in Leatherwood Creek in Eureka Springs. Once the unpermitted discharge has ceased, provide an email notification to SSOADEQ@adeq.state.ar.us with photographs confirming the unpermitted discharge has stopped.
<p>ADDITIONAL RESOURCES</p>	<p>If the WWTP crew is unable to contain and clean up the affected area with typical maintenance equipment, then the next step will be to bring in a Contractor or other construction support. The following steps will be taken by WWTP Management:</p> <ul style="list-style-type: none"> • Assess and mark the boundaries of the suspected area for all utility service locations (marking materials such as white paint will be used to mark the boundaries, and "Locate" will be written to indicate the area). • Call (811) CALL BEFORE YOU DIG. • Determine the additional resources and type of construction crew required to perform the task(s). • Call for additional resources using existing approved contact lists as deemed necessary. • Enlist appropriate contract services. • Manage actions taken by the additional construction crew to clean up the affected area. • Ensure actions are documented following the SSO reporting procedure.

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<p>FIELD REPORTING</p>	<p>Responding personnel will collect accurate and complete field data required to be submitted to DEQ. The following information shall be documented:</p> <ul style="list-style-type: none"> •Date and time of notification (SCADA, Public Notification, Staff Report) •Date and time of dispatch •Date and time of arrival •Date and time of departure •Date and time of release ended (estimated as close as possible) •Location •Probable cause •Estimated release •Visual impact observed •Actions to repair/mitigate
<p>REGULATORY REPORTING</p>	<p>The WWTP Manager or designee will report the SSO to the Arkansas Energy and Environment Department, Office of Water Quality within 24 hours. This Online Sanitary Sewer Overflow (SSO) Reporting Form can be found at: https://www.adeq.state.ar.us/water/enforcement/sso/submit.aspx</p> <p>This initial 24-hour report shall include the following information:</p> <ul style="list-style-type: none"> •Permit Number •Location of the overflow •The receiving water •Cause of the overflow •Estimated volume of overflow •Total duration of the overflow <p>If the “Total duration of the overflow” is not known when the 24-hour SSO online report is submitted, then a continue all operations to stop the unpermitted discharge from the wastewater treatment plant. Continue to timely report the SSOs and unpermitted discharges.</p> <p>Submit emails twice a week to provide updates to SSOADEQ@adeq.state.ar.us on the City’s progress towards stopping the unpermitted discharges and impacts to the water quality in Leatherwood Creek. Once the unpermitted discharge has ceased, provide an email notification to SSOADEQ@adeq.state.ar.us with photographs confirming the unpermitted discharge has stopped.</p> <p>Sample locations are shown in Exhibit B.</p>
<p>PUBLIC NOTIFICATION</p>	<p>When SSO reaches Leatherwood Creek, the City of Eureka Springs will take measures to inform those affected by the possible impact on water quality. The methods of public notification include:</p> <p>1. Signs will be posted at locations as shown in Exhibit B upon first response to the SSO advising against human contact with the affected water in accordance with this SOP. Signs will be removed when testing concludes bacteriological standards are achieved in accordance with the sampling and testing section in this SOP.</p> <p>Sign content shall be as follows:</p> <p>HEALTH ADVISORY WATER QUALITY IN THIS AREA MAY BE UNSAFE SWIM AT YOUR OWN RISK</p>

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	<p>Arkansas Department of Health</p> <p>4815 West Markham Street • Little Rock, Arkansas 72205-3867 Environmental Health (501) 661-2171 Epidemiology (501) 661-2893</p> <p>A picture of the sign to be used is attached to this as Exhibit C.</p> <p>2.A Health Advisory will be posted to the City of Eureka Springs Public Works page on Facebook. Regularly scheduled updates will also be posted through this Facebook page.</p> <p><u>ADVISORY</u> <i>As of [date and time] a NO SWIMMING Advisory has been issued for the Leatherwood Creek area north of Eureka Springs along Highway 23 North due to a wastewater overflow. The City of Eureka Springs will monitor the water quality in the area until it is safe for human contact. If you have any questions, you may contact the City of Eureka Springs Public Works Department at (479) 253-9600.</i></p> <p>3.Upon satisfaction of E. Coli testing as outlined in Sampling and Testing section of this SOP, the Recission of Advisory shall be provided.</p> <p><u>RECISSION OF ADVISORY</u> <i>The NO SWIMMING Advisory issued on [date and time] for the Leatherwood Creek area north of Eureka Springs along Highway 23 North has been cancelled. The Bacteriological survey indicates the water is safe for recreational activities. If you have any questions, you may contact the City of Eureka Springs Public Works Department at (479) 253-9600.</i></p>										
<p>ASSOCIATED EQUIPMENT</p>	<p>The following equipment may be deployed for responding to any SSO:</p> <table border="0"> <tr> <td>1.Flusher</td> <td>6.Shovels</td> </tr> <tr> <td>2.Backhoe</td> <td>7.Rakes</td> </tr> <tr> <td>3.Dump Truck</td> <td>8.Trash Pickers/Grabbers</td> </tr> <tr> <td>4.Crew Trucks</td> <td>9.Trash Bags</td> </tr> <tr> <td>5.Confined Space Entry Equipment</td> <td></td> </tr> </table>	1.Flusher	6.Shovels	2.Backhoe	7.Rakes	3.Dump Truck	8.Trash Pickers/Grabbers	4.Crew Trucks	9.Trash Bags	5.Confined Space Entry Equipment	
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Exhibit B

Sampling location sites for E. Coli

Legend

- Eureka Springs Wastewater Treatment?
- Feature 1
- Hideaway Cabin
- Leatherwood Creek
- Livingston Junction Cabooses
- Pivot Rock Park



Leatherwood Creek at the crossing of Hwy 23 N

Leatherwood Creek at the powerline crossing approximately 1/2 miles from the WWTP

Leatherwood Creek crossing near 835 Hwy 23 N

The confluence from the WWTP outfall into Leatherwood Creek

Leatherwood Creek upstream from the WWTP

EXHIBIT B

