

**City of Eureka Springs**  
**Public Works Dept.**

Jay Wilson Director  
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December 3, 2007

Mr. Gene Little  
Enforcement Administrator  
Water Division Enforcement Section, ADEQ  
5301 Northshore Drive  
North Little Rock, AR 72118

Re: NPDES Permit Number AR0021865, AFIN 08-0036, CAO LIS NO. 07-100  
Inflow & Infiltration Violations - Corrective Action Plan

Dear Mr. Little;

In accordance with the above referenced Consent Administrative Order LIS No. 07-100, we are hereby submitting our Corrective Action Plan detailing the steps the City will take to eliminate peak flows caused by inflow and infiltration and to eliminate all sanitary sewer overflows pursuant to paragraph 3 in the Order and Agreement Section.

After reviewing our files, we find that the City has previously completed a comprehensive collection system evaluation entitled "SEWER MASTER PLAN" and "INFILTRATION / INFLOW ANALYSIS" prepared by McClelland Consulting Engineers, Inc. dated April, 1999 and February, 2000. Included in the study was a flow monitoring report by RJN Group, Inc. dated August, 1996. These documents were prepared for Mr. Kirby Murray, previous Director of Public Works for the City. We have included a copy of these documents for your review and records.

While not completely up to date, these studies inventoried all existing sewer lines (length, diameter, slope, capacity, year constructed) and pump stations, provided a capacity analysis on all of the main sewer lines using "Hydroflow" and provided a hydraulic analysis of both private and public pump stations. The study also determined a base flow (0.244 MGD) including permanent infiltration (0.208 MGD) and peak infiltration (0.655 MGD). The study also identified certain sewer lines, which show their capacities exceeded by projected flows and made specific recommendations for sewer line upgrades and manhole replacements. A Sewer System Master Plan map labeled figure 1 is included in the appendix of the study.

A number of the recommendations to address sewer system overflows have been completed along Main Street (Hwy 23) and Mill Hollow Rd, which were identified as immediate priorities, during the reconstruction of Main Street, thereby reducing the previous overflow problems occurring at those locations.

Based on this information, our Corrective Action Plan will consist of the following tasks to be completed within one (1) year of the effective date of the Order and Agreement.

- 1) Review all of the City records and determine the extent of the sewer system improvements (including sewer system rehabilitation) completed since the studies were performed and prepare a supplemental report to update the Sewer System Master plan with respect to these improvements.
- 2) Identify all pumping stations that do not have auxiliary power or sufficient storage and direct notification alarms.
- 3) Identify all wastewater mains and pumping stations that cannot carry peak hydraulic loads caused by inflow and infiltration.

December 4, 2007

- 4) Prioritize sewer line and manhole rehabilitation and/ or replacement necessary to eliminate sewer system overflows.
  - 5) Prepare probable opinions of cost to perform the necessary replacements or rehabilitation of the sewer system and pumping station improvements.
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As you are aware, the new wastewater treatment plant can handle an average day flow of 0.90 MGD and an instantaneous flow of 3.25 MGD, which is substantially greater than the existing treatment facility. If sewer system overflows continue to occur, future flow monitoring may be necessary to determine locations where excessive inflow and infiltration is occurring.

We trust this response will comply with the Consent Administrative Order referenced above for the inflow and infiltration violations. If you need further information, or have any questions, please give me a call at 479-253-9600.

Sincerely,



Jay Wilson  
Public Works Director

cc: Mayor Dani Joy  
Charles R. Nickle, P.E.

Date Submitted: 12/31/07

NPDES Permit Compliance System

Batch

PCS

RDF8 Initials: GL

COMPLIANCE SCHEDULE CODING SHEET

NPDES PERMIT #:	<u>AR0021865</u>	Screen: CSCH
FACILITY NAME:	<u>City of Eureka Springs</u>	

TRANS CODE	<u>C</u>	TRANS CODE
COMPLIANCE SCHEDULE NUMBER	<u>MC</u>	<u>CSCH</u>
COMP. SCHED. DATA SOURCE CODE	<u>0711</u>	<u>DSCD</u>
COMP. SCHED. EVENT CODE	<u>08999</u>	<u>EVNT</u>
COMP. SCHED. SCHEDULE DATE		<u>DTSC</u>
COMP. SCHED. ACTUAL DATE	<u>12/03/07</u>	<u>DTAC</u>
COMP. SCHED. RECEIVED DATE	<u>12/05/07</u>	<u>DTRC</u>
COMP. SCHED. COMMENT		<u>COMM</u>
COMP. SCHED. DOCKET (LIS) #	<u>07-100</u>	<u>CSFN</u>

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