

CONSENT ADMINISTRATIVE ORDER

CAO LIS 22-082

SANITARY SEWER SYSTEM EVALUATION STUDY (SSSES) PLAN

NPDES Permit Number AR0044016 AFIN: 33-00036 ADC North Central Wastewater Treatment Facility Route 5, Highway North 5 Calico Rock, AR 72519

December 5, 2022

The Arkansas Department of Correction (ADC) owns and operates a wastewater treatment facility, the North Central Unit (NCU) situated at Calico Rock in Izard County. The wastewater treatment facility comprises wastewater collection system and a wastewater treatment plant (WWTP). The WWTP has an NPDES Permit Number AR0044106 with a design capacity of 0.09 MGD, and serves over 180 employees and a maximum unit capacity of approximately 800 prisoners. In addition, there will be another 800 prisoners in the future, thus doubling the number of prisoners (a total of 1,600).

The wastewater treatment plant has presently exceeded its design capacity. The average exceedance over the design capacity from 2017 to 2021 was approximately 46.4 percent. In 2021, it was estimated to be 77.8 percent over the design capacity. In this same year, the hydraulic capacity of the WWTP was exceeded by 172 percent. The NCU is in the process of upgrading the wastewater treatment plant to handle the current flows, and reduce the potential for NPDES Permit limits excursions.

It is, therefore, pertinent to eliminate the extraneous flows into the sewer lines that will inevitably wind up in the WWTP. The minimization of the extraneous flow would potentially reduce the cost of a new WWTP.

Consent Administrative Order, CAO LIS 22-082 issued by the Arkansas Division of Environmental Quality (DEQ) stipulates that Arkansas Department of Correction (ADC)-NCU develop a comprehensive sanitary sewer evaluation study for the wastewater collection system. Based on this, the following sanitary sewer programs have been developed.

	Milestone	Date
1.	System wide flow monitoring to determine dry-weather baseline flows within the collection network	Mar 1 - June 30, 2023
2.	Evaluate impact of wet-weather events throughout the entire sewer system.	Mar 1 – Jun 30, 2023
3.	Visual inspection and/or other methods to probe the system manholes including its subsurface components. In addition, all pipes entering or exiting the manhole structures will also be inspected for defects using known methods.	Jul 1 – Sep 30, 2023
4.	Manholes that show inconclusive evidence of I/I will be subject to dye water testing.	Oct 1 – Nov 30, 2023
5.	Smoke testing and dyed water flooding to simulate rainfall events.	Jul 1 – Nov 30, 2023
6.	Rehabilitation plan and the implementation of rehabilitation plan.	Jan 1 – Sep 30, 2024

It is imperative to note that the milestone dates are subject to change since the milestone activities are strongly dependent on the day-to-day weather.

The anticipated final compliance deadline would be December 31, 2024. Quarterly reports would be provided upon approval by the Arkansas Division of Environmental Quality (DEQ).