

March 9, 2017

Mr. Kyle Barber
Enforcement Analyst
Water Division, Enforcement Branch
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

FY152150

RE: Interim Operating Plan
NPDES Permit Number AR0022292, AFIN 04-00052
City of Decatur, CAO LIS 16-094

Dear Mr. Barber:

This letter serves as the interim operating plan as required by the referenced CAO for the Decatur Wastewater Treatment Plant (WWTP). Following is a description of the operational measures that will be undertaken at the WWP in order to maximize the removal efficiency of all pollutants covered by the permit. The attached *Figure 1* is an overall map of the WWTP with the interim operating measures identified.

Flow Diversion

During weekdays, the City is currently diverting flows that exceed the treatment capacity of the WWTP (3.0 MGD) to the equalization pond for temporary storage. This allows the plant operator to more effectively manage the operating efficiency of the plant by maintaining a more consistent flow through the treatment trains. The equalization pond has an estimated available capacity of 1.9 million gallons (MG), which is adequate storage to handle excess flows during weekdays.

On the weekends, the flow to the plant drops significantly, with the majority of the flow coming from the City of Centerton at an average rate of 0.7 MGD. During this time, the plant operator is able to pump the raw wastewater stored in the equalization pond into the WWTP.

This procedure will be continued until the proposed design process improvements are constructed, which will increase the WWTP capacity and eliminate the need for regular flow diversions to the equalization pond.

Sludge Storage and Processing

The current WWTP consists of three (3) sequencing batch reactors (SBRs) installed in parallel, followed by an Actiflo phosphorus removal system, UV disinfection, and post aeration. The existing sludge press cannot handle the amount of sludge produced by the current treatment process, and as a result, a significant amount of sludge has accumulated in the SBR tanks and Actiflo system. At times, the sludge blankets in the SBR tanks Actiflo system will "burp" solids, which in turn causes pollutant levels to exceed the permit limits.

In order to reduce the amount of sludge stored in the system, the City will install temporary pumps and piping from the Actiflo sludge return line and post equalization tanks into the existing pond located

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adjacent to the main WWTP. This existing pond has an estimated available capacity of 1.7 million gallons, which is more than adequate to temporarily store the excess sludge until it can be dewatered and processed for disposal. This will allow the SBR tanks and Actiflo to operate more efficiency and reduce the risk of solids being introduced into the effluent stream.

Currently, the existing sludge press is operated 40 hours per week on average. The operating time of the sludge press will be increased up to 80 hours per week as necessary to minimize the accumulation of sludge in the SBR tanks and Actiflo system, and to also process the sludge that will be temporarily diverted to the existing pond.

This procedure will be continued until the design process improvements are constructed and a new sludge press is installed which can process a higher volume of sludge.

UV Disinfection System

The existing UV disinfection system has a rated capacity of 3.0 MGD and is fitted with automatic wiper rings. The City has found that the automatic cleaning cycle may not be fully cleaning the UV quartz sleeves, and that manually cleaning the system has improved the disinfection efficiency. If necessary, the City will manually clean the UV system on a weekly basis in order to maximize the disinfection efficiency and reduce potential for fecal coliform limits to be exceeded. This will continue until a new UV system can be installed and placed into operation, which will occur as part of the planned improvements at the WWTP.

Plan Implementation

As previously discussed, flow diversion and temporary storage has already been implemented at the WWTP along with the routine manual cleaning of the UV disinfection system. The remaining measures in the plan will be implemented immediately with the goal of maximizing pollutant removal efficiency by May 31, 2017.

Please don't hesitate to let me know if you have any questions or need additional information.

Very Truly Yours,

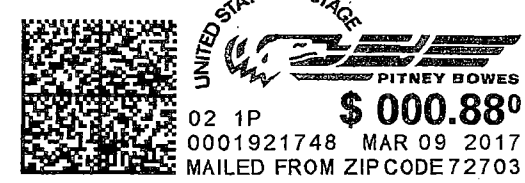


Nicholas R. Batker, PE, CFM

Encl: Figure 1

Cc: Mayor Robert Tharp
Mr. James Boston, Director of Public Works
Ryan Adler – Crossland Heavy Construction

MAP(S)/PLAN(S) SCANNED IN
SEPARATE FILE



MCE McCLELLAND
CONSULTING
DESIGNED TO SERVE ENGINEERS, INC.

P.O. Box 1229 • Fayetteville, Arkansas 72702-1229 • 479-443-2377

To:

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