



October 10, 2019

Ms. Bailey Taylor, Enforcement Analyst
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Re: NPDES Permit Number: AR0036692, AFIN-57-00423
Explanation of Permit Exceedance

Dear Ms. Taylor:

Permit exceedances for Total Suspended Solids (TSS) and pH were recorded at the Mena WWTP during the month of September 2019. Each of these exceedances were the direct result of excessive algal growth within the WWTP's lagoons. The unusually high algal growth rate is primarily attributable to the shallow depth of portions of the lagoons and an extended period of dry weather which increased the detention time in the treatment units. All effluent was filtered prior to discharge but the abnormally high solids loading rate limited the filtration's effectiveness.

In response to concerns voiced by an owner of property adjacent to the WWTP, the City contracted with CyanoLAB of Palatka Florida for special testing of cyanobacterial toxins. The laboratory analyzed samples collected within Lagoon 2, WWTP effluent following chlorination, and a sample collected at the confluence of Prairie Creek for microcystins/nodularins. The MCs/NODs concentration measured for the sample collected within Lagoon 2 was 31.5 ng/ml which exceeds the EPA recommended value of 8 ng/ml for recreational criteria and swimming advisory. Both of the other samples were found to have concentrations below the EPA recommended level so no further action was believed necessary.

Hawkins-Weir Engineers, Inc. recently submitted a Wastewater Treatment Master Plan to DEQ on behalf of the City of Mena per the terms of their CAO (CAO LIS 18-046). The City is in the process of identifying funding sources for the construction of a new activated sludge wastewater treatment facility that will not be subject to the risk of TSS or pH violations due to algal blooms. Construction of the new WWTP is scheduled to be complete by November 2023.

Respectfully Submitted,

HAWKINS-WEIR ENGINEERS, INC.

A handwritten signature in blue ink that reads 'Aaron Benzing'.

Aaron M. Benzing, P.E.

AMB/kad

cc: Mr. Charles Pitman, Mena Water Utilities General Manager
Mr. Mike Spencer, Mena Water Utilities Wastewater Superintendent

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