

INTERIM REPORT
Alma, Arkansas Wastewater Treatment Facility
Corrective Action Plan

NPDES Permit No. AR0021466
AFIN 17-00059

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Prepared for:

City of Alma, Arkansas

Prepared by:
Morrison Shipley Engineers, Inc.
5704 Euper Lane
Fort Smith, AR 72903
479-452-1933
www.morrisonshipley.com



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Pass/Fail Lethality (48-Hr NOEC) TEM3D		Report (Pass/Fail)		
Survival (48-Hr NOEC)		Report %		
Coeff. Of Variation		Report %		
Pass/Fail Retest 1		Report Pass/Fail		
Pass/Fail Retest 2		Report Pass/Fail		
Pass/Fail Retest 3		Report Pass/Fail		

The City entered a Consent Administrative Order in January 31, 2018 as a result of BOD₅ and TSS permit exceedances.

The Corrective Action Plan (CAP) for the City of Alma was developed in 2017. The corrective actions have been implemented within the schedule proposed and amended in March, 2018. This interim report is an update since the November 2018 report.

The treatment system continues to meet permit limits for BOD₅ and TSS since the first corrective actions were implemented by increasing aeration in 2017 and 2018.

Corrective Actions Implemented

The aeration equipment was repaired in Fall 2017 and all aeration is being used in cell 1 of lagoon 1. Lagoon 2 is partially-aerated.

With concurrence from ADEQ, alum and Earthtec® additions were discontinued in 2018.

Covers were fabricated to cover a portion of Lagoon 2 and were deployed over part of the lagoon. The covers were damaged by high winds as described later in this report.

Effect of Corrective Actions

The treatment system continues to meet permit limits following aeration equipment repairs and implementation, and without the addition of alum and Earthtec®. The Discharge Monitoring Reports (DMRs) indicate that the treatment facility has continued to meet the NPDES permit limits for BOD₅ and TSS since the corrective actions were implemented. The system had an exceedance of Fecal Coliform Bacteria (FCB) in August 2018.

Change of Material for Covering the Lagoons

The fabricated lagoon covers were damaged by high winds in June. Because of the wind damage and the need to meet the deadlines for the Corrective Action Plan and Consent Administrative Order (CAO), the decision was made to abandon fabricating the covers made from recycled materials. A commercially available lagoon covering product will be used. At this time, no change in concept is anticipated. As previously proposed, the procedure will be to cover the facultative lagoon downstream of the aerated lagoon. The cover will prevent sunlight from penetrating the water column and deter algae growth.

The product being used is Advanced Water Treatment Technologies (AWTT) Hexprotect® Aqua. The product is a UV-resistant, high-density polyethylene system consisting of multiple hexagonal floating "tiles." <http://www.awtti.com/hexprotect-aqua-hexagonal-cover/>