

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

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### Introduction

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 August 2018 report.

The treatment system continues to meet permit limits for BOD<sub>5</sub> 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.

### 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 May and June Discharge Monitoring Reports (DMRs) and the July laboratory results indicate that the treatment facility has continued to meet the NPDES permit limits through the summer.

### 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 has been 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 considered 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/> Each tile covers approximately 0.4 square foot, so covering one acre of the lagoon will require approximately 113,670 tiles. The tiles are advertised as being wind resistant up to 130 mph winds.

The AWTT cover material has been bid and the City Council has approved the purchase. QA contract for the purchase and production will be signed the week of October 29, 2018. The covers will be manufactured beginning early 2019. The material will require approximately 42 trucks for transportation, so the delivery and deployment will take place over several months.

Schedule Change

Because of the time to deliver and deploy the lagoon cover, Alma requests additional time for deploying the cover, and therefore requests an extension to the Corrective Action Plan. The project completion date is expected to be no later than May 31, 2019.