INTERIM REPORT
Alma, Arkansas Wastewater Treatment Facility
Corrective Action Plan

NPDES Permit No. AR0021466
AFIN 17-00059

August, 2018

Prepared for:

City of Alma, Arkansas

Prepared by:
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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 May 2018 report.

Corrective Actions Implemented

The aeration equipment was repaired in early 2018 and all aeration is being used in 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.

No schedule change is anticipated at this time.

DMR Copy of Record

Permit

Permit #:	AR0021465	**Permittee:**	ALMA, CITY OF	**Facility:**	ALMA, CITY OF
Major:	Yes	**Permittee Address:**	811 FAYETTEVILLE AVE., STE A ALMA, AR 72921	**Facility Location:**	2500 ORRICK RD ALMA, AR 72921
Permitted Feature:	001 External Outfall	**Discharge:**	001-A 001-MONTHLY-TRTD MUNICIPAL WW		

Report Dates & Status

Monitoring Period:	From 05/01/18 to 05/31/18	**DMR Due Date:**	06/25/18	**Status:**	NetDMR Validated

Considerations for Form Completion

Report flow as monthly average & daily maximum in million gallons per day. (S) Use Overflows (74062) to report total number of SSOs/Month. Use Overflow volume (74063) to report total volume of SSOs in gallons/month. Report "0" (zero), if no overflows during the entire month. See Part II, 5, (SSO).. 17-00059

Principal Executive Officer

First Name:	**Title:**	**Telephone:**
Last Name:		

No Data Indicator (NODI)

Form NODI: --

Parameter Code	Parameter Name	Monitoring Location	Season #	Param. NODI		Quantity or Loading Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Quality or Concentration Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units	# of Ex.	Frequency of Analysis	Sample Type
				Sample							=	6.2					19 - mg/L		03/07 - Three Per Week	GR - GRAB
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Permit Req.						>=	2 MO AV MIN					19 - mg/L	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
				Sample	=		150.6			26 - lb/d		18.2	=	22.1			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Permit Req.	<=	437.9 MO AVG			26 - lb/d	<=	30 MO AVG	<=	45.7 DA AVG			19 - mg/L	0	03/07 - Three Per Week	CP - COMPOS
					Value NODI															
				Sample							=	7.3			=	8.9	12 - SU		03/07 - Three Per Week	GR - GRAB
00400	pH	1 - Effluent Gross	0	--	Permit Req.						>=	6 MINIMUM			<=	9 MAXIMUM	12 - SU	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
				Sample	=		125.3			26 - lb/d		15.6	=	19			19 - mg/L		03/07 - Three Per Week	CP - COMPOS
00530	Solids, total suspended	1 - Effluent Gross	0	--	Permit Req.	<=	437.9 MO AVG			26 - lb/d	<=	30 MO AVG	<=	45.7 DA AVG			19 - mg/L	0	03/07 - Three Per Week	CP - COMPOS
					Value NODI															
				Sample	=		5.07			26 - lb/d	=	0.5	=	0.5			19 - mg/L		01/30 - Monthly	GR - GRAB
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	Permit Req.		Req Mon MO AVG			26 - lb/d		Req Mon MO AVG		Req Mon 7 DA AVG			19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Value NODI															
				Sample	=		25.35			26 - lb/d	=	2.5	=	2.5			19 - mg/L		01/30 - Monthly	GR - GRAB
00665	Phosphorus, total [as P]	1 - Effluent Gross	0	--	Permit Req.		Req Mon MO AVG			26 - lb/d		Req Mon MO AVG		Req Mon 7 DA AVG			19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Value NODI															
				Sample	=		0.981	A	1.522	03 - MGD									01/01 - Daily	TM - TOTALZ
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD								0	01/01 - Daily	TM - TOTALZ
					Value NODI															
				Sample											=	0.04	19 - mg/L		03/07 - Three Per Week	GR - GRAB
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Permit Req.										<=	* INST MAX	19 - mg/L	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
				Sample							=	32	=	59			13 - #/100mL		03/07 - Three Per Week	GR - GRAB
74055	Coliform, fecal general	1 - Effluent Gross	0	--	Permit Req.						<=	200 30DA GEO	<=	400 7 DA GEO			13 - #/100mL	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
				Sample	=		0			93 - occur/mo									999 - See Comments	999 - See Comments
74062	Overflows	S - See Comments	0	--	Permit Req.		Req Mon MO TOTAL			93 - occur/mo								0	999 - See Comments	999 - See Comments
					Value NODI															
				Sample	=		0			57 - gal									999 - See Comments	999 - See Comments
74063	Overflow volume [SSO volume, CSO volume]	S - See Comments	0	--	Permit Req.		Req Mon MO TOTAL			57 - gal								0	999 - See Comments	999 - See Comments
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

ALMA, CITY OF

DMR Copy of Record

Permit

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Major:	Yes	**Permittee Address:**	811 FAYETTEVILLE AVE., STE A ALMA, AR 72921	**Facility Location:**	2500 ORRICK RD ALMA, AR 72921
Permitted Feature:	001 External Outfall	**Discharge:**	001-A 001-MONTHLY-TRTD MUNICIPAL WW		

Report Dates & Status

Monitoring Period:	From 06/01/18 to 06/30/18	**DMR Due Date:**	07/25/18	**Status:**	NetDMR Validated

Considerations for Form Completion

Report flow as monthly average & daily maximum in million gallons per day. (S) Use Overflows (74062) to report total number of SSOs/Month. Use Overflow volume (74063) to report total volume of SSOs in gallons/month. Report "0" (zero), if no overflows during the entire month. See Part II. 5. (SSO).. 17-00059

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00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample						=	4					19 - mg/L		03/07 - Three Per Week	GR - GRAB
					Permit Req.						>=	2 MO AV MN					19 - mg/L	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
00310	BOD, 5-day, 20 deg. C	1 - Effluent Gross	0	--	Sample	=	73.2			26 - lb/d			=	13.9	=	19.3	19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.	<=	437.9 MO AVG			26 - lb/d			<=	30 MO AVG	<=	45.7 DA AVG	19 - mg/L	0	03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00400	pH	1 - Effluent Gross	0	--	Sample						=	7.3			=	8.7	12 - SU		03/07 - Three Per Week	GR - GRAB
					Permit Req.						>=	6 MINIMUM			<=	9 MAXIMUM	12 - SU	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample	=	89.3			26 - lb/d			=	19.3	=	27.7	19 - mg/L		03/07 - Three Per Week	CP - COMPOS
					Permit Req.	<=	437.9 MO AVG			26 - lb/d			<=	30 MO AVG	<=	45.7 DA AVG	19 - mg/L	0	03/07 - Three Per Week	CP - COMPOS
					Value NODI															
00630	Nitrite + Nitrate total [as N]	1 - Effluent Gross	0	--	Sample	=	1.49			26 - lb/d			=	0.5	=	0.5	19 - mg/L		01/30 - Monthly	GR - GRAB
					Permit Req.		Req Mon MO AVG			26 - lb/d				Req Mon MO AVG		Req Mon 7 DA AVG	19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Value NODI															
00665	Phosphorus, total [as P]	1 - Effluent Gross	0	--	Sample	=	8.93			26 - lb/d			=	3	=	3	19 - mg/L		01/30 - Monthly	GR - GRAB
					Permit Req.		Req Mon MO AVG			26 - lb/d				Req Mon MO AVG		Req Mon 7 DA AVG	19 - mg/L	0	01/30 - Monthly	GR - GRAB
					Value NODI															
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	=	0.605	=	1.226	03 - MGD									01/01 - Daily	TM - TOTAL Z
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD								0	01/01 - Daily	TM - TOTAL Z
					Value NODI															
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample										=	0.04	19 - mg/L		03/07 - Three Per Week	GR - GRAB
					Permit Req.										<=	.1 INST MAX	19 - mg/L	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
74055	Coliform, fecal general	1 - Effluent Gross	0	--	Sample								=	36	=	97	13 - #/100mL		03/07 - Three Per Week	GR - GRAB
					Permit Req.								<=	200 30DA GEO	<=	400 7 DA GEO	13 - #/100mL	0	03/07 - Three Per Week	GR - GRAB
					Value NODI															
74062	Overflows	S - See Comments	0	--	Sample	=	0			93 - occur/mo									999 - See Comments	999 - See Comments
					Permit Req.		Req Mon MO TOTAL			93 - occur/mo								0	999 - See Comments	999 - See Comments
					Value NODI															
74063	Overflow volume [SS0 volume, CSO volume]	S - See Comments	0	--	Sample	=	0			57 - gal									999 - See Comments	999 - See Comments
					Permit Req.		Req Mon MO TOTAL			57 - gal								0	999 - See Comments	999 - See Comments
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type

Edit Check Errors

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Comments

Attachments

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Report Last Saved By

ALMA, CITY OF

City of Alma

EFFLUENT LOADING REPORT

Month July
Year 20 18

MAG

DATE	BOD mg/L	BOD 7 day avg.	TSS mg/L	TSS 7 day avg.	BOD Pounds	TSS Pounds	Total Flow
1							
2	10		3		62.38	18.71	0.748
3	10	9.67	8	7.33	65.30	52.24	0.783
4							
5	9		11		56.07	68.53	0.747
6							
7							
8							
9	11		24		57.52	125.50	0.627
10	10	9.00	19	21.33	48.46	92.07	0.581
11	6		21		26.97	94.40	0.539
12							
13							
14							
15							
16	15		29		54.67	105.69	0.437
17	13	14.00	13	20.00	47.49	47.49	0.438
18	14		18		63.28	81.37	0.542
19							
20							
21							
22							
23	11		26		35.96	85.00	0.392
24	14	12.33	32	30.67	43.08	98.48	0.369
25	12		34		35.63	100.95	0.356
26							
27							
28							
29							
30	25		31		170.97	212.00	0.820
31	21		35		137.31	228.85	0.784
Max	25	14.00	35	30.67	170.97	228.85	0.820
Min	6		3		26.97	18.71	0.356
Avg.	12.93		21.71		64.65	100.81	0.583