

RECEIVED
DEC 31 2019
Kn 3330

LRWRA Operations Division Receipt of Hand Delivered Mail


Date: December 31, 2019

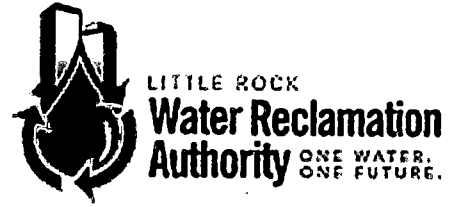
To: Arkansas Department of Environmental Quality

From: Walter B. Collins, P.E.
Director of Operations and Facilities

Regarding: Adams Field Water Reclamation Facility
New Effluent Limitations Progress Letter No. 2
NPDES Permit No. AR0021806 AFIN: 60-00409

On behalf of the Arkansas Department of Environmental Quality (ADEQ), I hereby acknowledge receipt of the letter dated December 31, 2019 from Walter Collins of Little Rock Water Reclamation Authority addressed to ADEQ – Richard Healey, Enforcement Branch, referencing Progress Report for new Final Effluent Limitations for permit AR0021806.

<input type="checkbox"/> Accepted By:	_____	_____
<input type="checkbox"/> Picked Up By:	Arkansas Department of Environmental Quality	Date
<input checked="" type="checkbox"/> Delivered By:		12/31/19
<input type="checkbox"/> Picked Up By:	Little Rock Water Reclamation Authority	Date



December 31, 2019

Richard Healey, Enforcement Branch
Office of Water Quality
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118

RE: Adams Field Water Reclamation Facility
Progress Report No. 2
NPDES Permit No. AR0021806 AFIN: 60-00409

Dear Mr. Healey,

Please accept this letter and accompanying construction schedule layout regarding the Adams Field Water Reclamation Facility progress towards attaining compliance with the new Final Effluent Limitations for CBOD5 and NH3-N in accordance with NPDES Renewal Permit No. AR0021806. LRWRA's consulting engineers have reported that as of December 19, 2019, approximately 33.85% of the Contract Work has been completed and 70.30% of the Contract Time to Final Completion has been expended. Approximately 66.70% of the total Contract Amount has been paid to the Contractor through completed Work and Stored Materials.

As you may recall, LRWRA submitted a Construction Permit Application with drawings and design details on December 19, 2017. The State Construction Permit No. AR0021806C was approved effective May 15, 2018. We received the notice to proceed for the Adams Field Parallel Treatment Project on May 24, 2018. The project includes two distinct facets. First is that of adding parallel treatment for wet weather flows, and secondly is the necessary modifications to the aeration basins, secondary clarifiers, and other treatment processes to achieve ammonia reductions.



The accompanying construction schedule details the remaining construction activities and their anticipated start and completion dates. While the percentage of Contract Work remaining appears significant, the construction schedule clearly indicates that substantial completion of all major work shall be within the 4th Quarter of 2020, and ahead of the January 1, 2021 Compliance Schedule deadline.

Should you have any questions concerning this notification please give me a call at (501)688-1429 or email me at walter.collins@lrwra.com.

Sincerely

LITTLE ROCK WATER RECLAMATION AUTHORITY

A handwritten signature in black ink, appearing to read "Walter B. Collins".

Walter B. Collins, P.E.

Director of Operations and Facilities

Cc: Howell Anderson, COO

Jamie Ewing, Director of Environmental Assessment Department

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Calendar																	
								Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct							
AFWRF Adams Field								223	223	0%	20-Nov-19	25-Sep-20	-1	12-Feb-20, AFWRF1 Effluent Pump Station											
AFWRF.1 Effluent Pump Station								61	61	0%	20-Nov-19	12-Feb-20	161	23-Jul-20, AFWRF2 UV/Filtration Facility											
A1660	Crack Injection	5	5	0%	20-Nov-19	26-Nov-19	49	Crack Injection																	
A1670	Perform Water Tightness Testing	4	4	0%	27-Nov-19	02-Dec-19	49	Perform Water Tightness Testing																	
A1671	Structure Backfill	10	10	0%	03-Dec-19	16-Dec-19	49	Structure Backfill																	
A1672	Remove Sheet Piles	10	10	0%	17-Dec-19	30-Dec-19	49	Remove Sheet Piles																	
A1680	Coarse Drain Fill - Channel	2	2	0%	03-Dec-19	04-Dec-19	161	Coarse Drain Fill - Channel																	
A1690	Form/Pour Channel Slab	5	5	0%	05-Dec-19	11-Dec-19	161	Form/Pour Channel Slab																	
A1700	Install Grout Fill	10	10	0%	12-Dec-19	25-Dec-19	161	Install Grout Fill																	
A1710	Mechanical Piping Installation	10	10	0%	26-Dec-19	08-Jan-20	161	Mechanical Piping Installation																	
A1720	Install Pumps & Motors	5	5	0%	09-Jan-20	15-Jan-20	176	Install Pumps & Motors																	
A1730	Install Misc. Metals (Stairs, Handrail, Hatches)	5	5	0%	16-Jan-20	22-Jan-20	176	Install Misc. Metals (Stairs, Handrail, Hatches)																	
A1740	Electrical & Instrumentation	15	15	0%	09-Jan-20	29-Jan-20	161	Electrical & Instrumentation																	
A1750	Startup & Testing	10	10	0%	30-Jan-20	12-Feb-20	161	Startup & Testing																	
AFWRF.2 UV/Filtration Facility								177	177	0%	20-Nov-19	23-Jul-20	45	14-Feb-20, APWRF3 Electrical Building											
A2190	Place Stone - Filtration Channel	2	2	0%	20-Nov-19	21-Nov-19	45	Place Stone - Filtration Channel																	
A2200	Form & Pour Filtration Channels	10	10	0%	22-Nov-19	05-Dec-19	210	Form & Pour Filtration Channels																	
A2210	Form & Pour Filtration Slabdeck	20	20	0%	22-Nov-19	19-Dec-19	45	Form & Pour Filtration Slabdeck																	
A2211	Perform Watertightness Test	5	5	0%	20-Dec-19	26-Dec-19	95	Perform Watertightness Test																	
A2212	Install Grout Fill	10	10	0%	27-Dec-19	09-Jan-20	185	Install Grout Fill																	
A2213	Masonry Installation	15	15	0%	27-Dec-19	16-Jan-20	95	Masonry Installation																	
A2214	Install Stair System	10	10	0%	17-Jan-20	30-Jan-20	170	Install Stair System																	
A2215	Install Mechanical Piping & Valves	25	25	0%	17-Jan-20	20-Feb-20	95	Install Mechanical Piping & Valves																	
A2216	Install Centrifugal Pumps	5	5	0%	21-Feb-20	27-Feb-20	95	Install Centrifugal Pumps																	
A2217	Install Disc Filter Equipment	25	25	0%	28-Feb-20	02-Apr-20	95	Install Disc Filter Equipment																	
A2218	Install Slide Gates	10	10	0%	03-Apr-20	16-Apr-20	95	Install Slide Gates																	
A2219	Install Filter Covers	10	10	0%	17-Apr-20	30-Apr-20	95	Install Filter Covers																	
A2220	Install Misc. Metals	10	10	0%	01-May-20	14-May-20	95	Install Misc. Metals																	
A2221	Electrical Installation & Hookup	60	60	0%	17-Jan-20	09-Apr-20	120	Electrical Installation & Hookup																	
A2222	Form & Pour UV Interior Walls	20	20	0%	20-Dec-19	16-Jan-20	45	Form & Pour UV Interior Walls																	
A2223	Place Stone for UV Channels	5	5	0%	17-Jan-20	23-Jan-20	45	Place Stone for UV Channels																	
A2230	Form & Pour UV Channel Slabs	15	15	0%	24-Jan-20	13-Feb-20	45	Form & Pour UV Channel Slabs																	
A2240	Form & Pour UV Walkways	20	20	0%	14-Feb-20	12-Mar-20	45	Form & Pour UV Walkways																	
A2250	Perform Watertightness Test	5	5	0%	17-Jan-20	23-Jan-20	45	Perform Watertightness Test																	
A2251	Structure Backfill	10	10	0%	24-Jan-20	06-Feb-20	45	Structure Backfill																	
A2260	Install UV Equipment	10	10	0%	13-Mar-20	26-Mar-20	130	Install UV Equipment																	
A2261	Install Canopy	10	10	0%	13-Mar-20	26-Mar-20	100	Install Canopy																	
A2262	Roofing (Electrical Rooms & Canopy)	10	10	0%	27-Mar-20	09-Apr-20	100	Roofing (Electrical Rooms & Canopy)																	
A2270	Electrical Installation & Hookup	80	80	0%	13-Mar-20	02-Jul-20	45	Electrical Installation & Hookup																	
A2272	Painting	20	20	0%	10-Apr-20	07-May-20	100	Painting																	
A2670	Startup & Testing	15	15	0%	03-Jul-20	23-Jul-20	45	Startup & Testing																	
AFWRF.3 Electrical Building								63	63	0%	20-Nov-19	14-Feb-20	159	21-May-20, AFWRF4 NPW Pump Station											
A1760	Masonry	10	10	0%	20-Nov-19	03-Dec-19	18	Masonry																	
A1770	Install Roof Joists & Decking	5	5	0%	30-Dec-19	03-Jan-20	0	Install Roof Joists & Decking																	
A1780	Roofing Installation	5	5	0%	06-Jan-20	10-Jan-20	159	Roofing Installation																	
A1800	Painting	5	5	0%	13-Jan-20	17-Jan-20	159	Painting																	
A1810	Electrical Installation & Hookup	20	20	0%	20-Jan-20	14-Feb-20	159	Electrical Installation & Hookup																	
AFWRF.4 NPW Pump Station								93	93	0%	14-Jan-20	21-May-20	90	25-Sep-20, AFWRF5 Secondary Clarifiers											
A1860	Shoring Installation	10	10	0%	14-Jan-20	27-Jan-20	90	Shoring Installation																	
A1870	Excavation	5	5	0%	28-Jan-20	03-Feb-20	90	Excavation																	
A1880	Base Stone	3	3	0%	04-Feb-20	06-Feb-20	90	Base Stone																	
A1890	Form & Pour SOG	5	5	0%	07-Feb-20	13-Feb-20	90	Form & Pour SOG																	
A1900	Form & Pour Structure Walls	15	15	0%	14-Feb-20	05-Mar-20	90	Form & Pour Structure Walls																	
A1910	Form & Pour Slabdeck	25	25	0%	06-Mar-20	09-Apr-20	90	Form & Pour Slabdeck																	
A1911	Watertightness Testing	5	5	0%	10-Apr-20	16-Apr-20	90	Watertightness Testing																	
A1920	Install NPW Pump Station Equipment	5	5	0%	17-Apr-20	23-Apr-20	110	Install NPW Pump Station Equipment																	
A1970	Electrical Installation & Hookup	20	20	0%	17-Apr-20	14-May-20	90	Electrical Installation & Hookup																	
A1980	Startup & Testing	5	5	0%	15-May-20	21-May-20	90	Startup & Testing																	
AFWRF.5 Secondary Clarifiers								223	223	0%	20-Nov-19	25-Sep-20	-1	Clarifier Equipment Coating											
AFWRF.5.1 Clarifier #1								74	74	0%	20-Nov-19	02-Mar-20	-1	02-Mar-20, AFWRF5.1 Clarifier #1											
A1992	Clarifier Equipment Coating	4	4	0%	20-Nov-19	25-Nov-19	-1	Clarifier Equipment Coating																	
A2001	Install Weir & Scum Baffle	10	10	0%	26-Nov-19	09-Dec-19	-1	Install Weir & Scum Baffle																	
A2011	Install Trough Covers	10	10	0%	10-Dec-19	23-Dec-19	-1	Install Trough Covers																	
A2400	Install Arm Assembly	5	5	0%	24-Dec-19	30-Dec-19	-1	Install Arm Assembly																	
A2401	Install Walkway	5	5	0%	31-Dec-19	06-Jan-20	-1	Install Walkway																	
A2410	Grout Bottom of Clarifier	5	5	0%	07-Jan-20	13-Jan-20	-1	Grout Bottom of Clarifier																	
A2411	Install Scum Trough	5	5	0%	14-Jan-20	20-Jan-20	-1	Install Scum Trough																	
A2412	Clarifier Final Coating	5	5	0%	21-Jan-20	27-Jan-20	-1	Clarifier Final Coating																	
A2421	Electrical Installation & Hookup	5	5	0%	28-Jan-20	03-Feb-20	-1	Electrical Installation & Hookup																	
A2431	Startup & Testing	20	20	0%	04-Feb-20	02-Mar-20	-1	Startup & Testing																	

Actual Level of Effort
 Remaining Work
 Milestone
 Critical Remaining Work
 summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
AFWRF.5.2 Clarifier #2		118	118	0%	06-Jan-20	17-Jun-20	-1											
A2430	Demo Existing Equipment	5	5	0%	03-Mar-20	09-Mar-20	-1											
A2440	Grout Demo	15	15	0%	10-Mar-20	30-Mar-20	-1											
A2450	Trough Coating	10	10	0%	31-Mar-20	13-Apr-20	-1											
A2460	Clarifier Equipment Delivery	1	1	0%	06-Jan-20*	06-Jan-20	0											
A2470	Clarifier Equipment Coating	15	15	0%	07-Jan-20	27-Jan-20	54											
A2480	Install Center Column	3	3	0%	14-Apr-20	16-Apr-20	-1											
A2490	Install Weir & Scum Baffle	4	4	0%	17-Apr-20	22-Apr-20	-1											
A2491	Install Trough Covers	5	5	0%	23-Apr-20	29-Apr-20	-1											
A2500	Install Center Drive	2	2	0%	30-Apr-20	01-May-20	-1											
A2510	Install Arm Assembly	10	10	0%	04-May-20	15-May-20	-1											
A2511	Install Walkway	3	3	0%	18-May-20	20-May-20	-1											
A2520	Grout Bottom of Clarifier	5	5	0%	21-May-20	27-May-20	-1											
A2530	Install Scum Trough	5	5	0%	28-May-20	03-Jun-20	-1											
A2540	Electrical Installation & Hookup	5	5	0%	04-Jun-20	10-Jun-20	-1											
A2680	Startup & Testing	5	5	0%	11-Jun-20	17-Jun-20	-1											
AFWRF.5.3 Clarifier #3		155	155	0%	24-Feb-20	25-Sep-20	-1											
A2550	Demo Existing Equipment	5	5	0%	18-Jun-20	24-Jun-20	-1											
A2560	Grout Demo	15	15	0%	25-Jun-20	15-Jul-20	-1											
A2570	Trough Coating	5	5	0%	16-Jul-20	22-Jul-20	-1											
A2580	Clarifier Equipment Delivery	1	1	0%	24-Feb-20*	24-Feb-20	0											
A2590	Clarifier Equipment Coating	15	15	0%	25-Feb-20	16-Mar-20	91											
A2600	Install Center Column	3	3	0%	23-Jul-20	27-Jul-20	-1											
A2610	Install Weir & Scum Baffle	4	4	0%	28-Jul-20	31-Jul-20	-1											
A2611	Install Trough Covers	5	5	0%	03-Aug-20	07-Aug-20	-1											
A2620	Install Center Drive	2	2	0%	10-Aug-20	11-Aug-20	-1											
A2630	Install Arm Assembly	10	10	0%	12-Aug-20	25-Aug-20	-1											
A2631	Install Walkway	3	3	0%	26-Aug-20	28-Aug-20	-1											
A2640	Grout Bottom of Clarifier	5	5	0%	31-Aug-20	04-Sep-20	-1											
A2650	Install Scum Trough	5	5	0%	07-Sep-20	11-Sep-20	-1											
A2660	Electrical Installation & Hookup	5	5	0%	14-Sep-20	18-Sep-20	-1											
A2690	Startup & Testing	5	5	0%	21-Sep-20	25-Sep-20	-1											
AFWRF.6 Aeration Basins		211	211	0%	20-Nov-19	09-Sep-20	11											
AFWRF.6.1 Aeration Basin #1		10	10	0%	20-Nov-19	03-Dec-19	13											
A1000	Re-Install FRP Weirs	5	5	0%	20-Nov-19	26-Nov-19	13											
A1010	Re-Install Rotating Scum Weir	5	5	0%	27-Nov-19	03-Dec-19	13											
AFWRF.6.3 Aeration Basin #3		57	57	0%	20-Nov-19	06-Feb-20	165											
A1220	Concrete & Pipe Demo	3	3	0%	20-Nov-19	22-Nov-19	165											
A1230	Divider Wall & Launder Concrete	5	5	0%	25-Nov-19	29-Nov-19	214											
A1240	Install Baffle Walls	10	10	0%	25-Nov-19	06-Dec-19	165											
A1250	Install New Slide Gates	3	3	0%	09-Dec-19	11-Dec-19	165											
A1260	Install Rotating Scum Weir	2	2	0%	12-Dec-19	13-Dec-19	191											
A1261	Install FRP Weir	3	3	0%	16-Dec-19	18-Dec-19	191											
A1270	Install Scum Line & Brackets	5	5	0%	12-Dec-19	18-Dec-19	165											
A1280	Install SS Air Piping & Brackets	10	10	0%	19-Dec-19	01-Jan-20	165											
A1290	Install Aeration Diffusers	10	10	0%	19-Dec-19	01-Jan-20	191											
A1300	Install Air Mixing Piping	8	8	0%	02-Jan-20	13-Jan-20	165											
A1310	Install Air Mixing Headers	8	8	0%	14-Jan-20	23-Jan-20	165											
A1320	Basin Startup & Testing	10	10	0%	24-Jan-20	06-Feb-20	165											
AFWRF.6.4 Aeration Basin #4		66	66	0%	23-Dec-19	23-Mar-20	11											
A1330	Concrete & Pipe Demo	15	15	0%	23-Dec-19*	10-Jan-20	0											
A1340	Divider Wall & Launder Concrete	10	10	0%	13-Jan-20	24-Jan-20	20											
A1350	Install Baffle Walls	10	10	0%	13-Jan-20	24-Jan-20	11											
A1360	Install New Slide Gates	3	3	0%	27-Jan-20	29-Jan-20	20											
A1370	Install Rotating Scum Weir	4	4	0%	30-Jan-20	04-Feb-20	20											
A1371	Install FRP Weirs	5	5	0%	27-Jan-20	31-Jan-20	11											
A1380	Install Scum Line & Brackets	5	5	0%	05-Feb-20	11-Feb-20	20											
A1390	Install SS Air Piping & Brackets	10	10	0%	03-Feb-20	14-Feb-20	11											
A1400	Install Aeration Diffusers	10	10	0%	12-Feb-20	25-Feb-20	20											
A1410	Install Air Mixing Piping	8	8	0%	17-Feb-20	26-Feb-20	11											
A1420	Install Air Mixing Headers	8	8	0%	27-Feb-20	09-Mar-20	11											
A1430	Basin Startup & Testing	10	10	0%	10-Mar-20	23-Mar-20	11											
AFWRF.6.5 Aeration Basin #5		69	69	0%	24-Mar-20	26-Jun-20	64											
A1440	Concrete & Pipe Demo	15	15	0%	24-Mar-20	13-Apr-20	11											
A1450	Divider Wall & Launder Concrete	10	10	0%	14-Apr-20	27-Apr-20	11											
A1460	Install Baffle Walls	10	10	0%	14-Apr-20	27-Apr-20	79											
A1470	Install New Slide Gates	3	3	0%	28-Apr-20	30-Apr-20	11											
A1480	Install Rotating Scum Weir	4	4	0%	28-Apr-20	01-May-20	79											
A1481	Install FRP Weirs	5	5	0%	01-May-20	07-May-20	11											
A1490	Install Scum Line & Brackets	5	5	0%	04-May-20	08-May-20	79											
A1500	Install SS Air Piping & Brackets	10	10	0%	08-May-20	21-May-20	11											
A1510	Install Aeration Diffusers	10	10	0%	11-May-20	22-May-20	79											

Actual Level of Effort
 Remaining Work
 Critical Remaining Work
 Milestone
 summary

Activity ID	Activity Name	Original Duration	Remaining Duration	Schedule % Complete	Start	Finish	Total Float	Classic Schedule Layout											
								Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
A2790	60" PCE-CCFRPM	15	15	0%	02-Dec-19*	20-Dec-19	0	[Gantt bar: 60" PCE-CCFRPM, Dec 2 to Dec 20]											
A2791	36" SW-RCP	10	10	0%	23-Dec-19	03-Jan-20	0	[Gantt bar: 36" SW-RCP, Dec 23 to Jan 3]											
A2792	12" SC-DI	20	20	0%	06-Jan-20*	31-Jan-20	0	[Gantt bar: 12" SC-DI, Jan 6 to Jan 31]											
A2793	30" TOF	20	20	0%	03-Feb-20	28-Feb-20	149	[Gantt bar: 30" TOF, Feb 3 to Feb 28]											
A2800	14" NPW-DI	10	10	0%	01-May-20	14-May-20	95	[Gantt bar: 14" NPW-DI, May 1 to May 14]											
A2810	8" NPW-DI	10	10	0%	01-May-20	14-May-20	95	[Gantt bar: 8" NPW-DI, May 1 to May 14]											
A2820	4" NPW-DI	10	10	0%	01-May-20	14-May-20	95	[Gantt bar: 4" NPW-DI, May 1 to May 14]											
A2830	6" WAS-DI	10	10	0%	01-May-20	14-May-20	45	[Gantt bar: 6" WAS-DI, May 1 to May 14]											
A2840	8" SC-DI	10	10	0%	15-May-20	28-May-20	45	[Gantt bar: 8" SC-DI, May 15 to May 28]											
A2850	12"/8"/6" BW-DI	15	15	0%	29-May-20	18-Jun-20	70	[Gantt bar: 12"/8"/6" BW-DI, May 29 to Jun 18]											
A2860	60" SCE-CCFRPM	25	25	0%	07-Feb-20	12-Mar-20	45	[Gantt bar: 60" SCE-CCFRPM, Feb 7 to Mar 12]											
A2870	72" FR-CCFRPM	35	35	0%	13-Mar-20	30-Apr-20	45	[Gantt bar: 72" FR-CCFRPM, Mar 13 to Apr 30]											
A2880	24" NPW-DI	5	5	0%	29-May-20	04-Jun-20	45	[Gantt bar: 24" NPW-DI, May 29 to Jun 4]											
A2890	10"/3" NPW-DI	10	10	0%	05-Jun-20	18-Jun-20	45	[Gantt bar: 10"/3" NPW-DI, Jun 5 to Jun 18]											
A2900	3" NPW-DI	10	10	0%	19-Jun-20	02-Jul-20	45	[Gantt bar: 3" NPW-DI, Jun 19 to Jul 2]											
A2910	1" PAA	5	5	0%	03-Jul-20	09-Jul-20	45	[Gantt bar: 1" PAA, Jul 3 to Jul 9]											
A2920	6" NPW-DI	5	5	0%	13-Jul-20	17-Jul-20	49	[Gantt bar: 6" NPW-DI, Jul 13 to Jul 17]											
A2930	2" G-PA	10	10	0%	10-Jul-20	23-Jul-20	45	[Gantt bar: 2" G-PA, Jul 10 to Jul 23]											
A2940	30" RAS-DI	20	20	0%	15-Jun-20	10-Jul-20	49	[Gantt bar: 30" RAS-DI, Jun 15 to Jul 10]											
A2950	3" NPW-DI	3	3	0%	13-Jul-20	15-Jul-20	51	[Gantt bar: 3" NPW-DI, Jul 13 to Jul 15]											

Actual Level of Effort
 Remaining Work
 Critical Remaining Work
 Milestone
 summary