



June 12, 2019

*Via email*

Leslie Allen-Daniel  
Bryan Leamons  
Office of Water Quality  
Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118

RE: Flooding impacts/upset conditions at Little Rock Water Reclamation Authority facilities – Adams Field WRF, Fourche Creek WRF, and Little Maumelle WRF

Leslie/Bryan,

The Little Rock Water Reclamation Authority (LRWRA) submits this final written report on current conditions and actions taken at our permitted facilities in response to the historic flooding of the Arkansas River. This flooding created upset conditions, as defined by Part IV our permits as “an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee.” This noncompliance was not caused by “operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless [or] improper operations.”

Our sampling from the week of June 2-8 shows that we will not meet the weekly average permit limit for fecal coliform at the Adams Field WRF. I’ve inserted, below, a quick chart that shows our sampling data from that week. By the start of this flow week (June 10), fecal coliform was measured at 348 MPN/100 mL, which is within permit limits. While we have not completed the sampling for the month of June, it is also likely that monthly average for fecal coliform at Adams Field will also be exceeded. In addition to this report, the exceedances and any associated documentation will be included in our Discharge Monitoring Report.

Attached to this letter is a chart outlining current conditions at our three water reclamation facilities and any actions that have been taken to address current conditions.

Thank you for your assistance. If you have any questions about the attachment or need further information, please do not hesitate to contact me.

Sincerely,

Jamie L. Ewing  
Director of Environmental Assessment (see next page for signatory certification)

DMR Week 2

Date	Day	Adams Field Final Effluent Weekly Values											
		Flow MGD	TSS mg/L	BOD <sub>5</sub> mg/L	CBOD <sub>5</sub> mg/L	pH S.U.	PAA (Meter) Residual, mg/L	FCB MPN/100 mL	NH <sub>3</sub> -N mg/L	Phosphorus mg/L	NO <sub>3</sub> -NO <sub>2</sub> -N mg/L	PAA Feed (Yes)	UVT %
06/02/19	Sun.	52.05											
06/03/19	Mon.	52.59	20.1	4.22		6.84	0.57	38,730				Yes	
06/04/19	Tue.	53.24	30.7			6.88	0.43	41,030	<0.14			Yes	
06/05/19	Wed.	53.55	29.3				0.48	54,750				Yes	
06/06/19	Thu.	54.58					0.63	111,990				Yes	
06/07/19	Fri.	53.40					0.38	51,720				Yes	
06/08/19	Sat.	42.72					0.75	64,880				Yes	
7-Day Ave.		51.73	26.7	4.22	N/A	N/A	N/A	N/A	0.14	N/A	N/A	N/A	N/A
Geo. Ave.		N/A	N/A	N/A	N/A	N/A	N/A	56,548	N/A	N/A	N/A	N/A	N/A
Maximum		N/A	N/A	N/A	N/A	6.88	0.75	N/A	N/A	N/A	N/A	N/A	N/A
Minimum		N/A	N/A	N/A	N/A	6.84	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Jamie L. Ewing  
 Director of Environmental Assessment

Permit	Conditions/Actions
<p><b>Adams Field WRF</b>  NPDES Permit No.  AR0021806  AFIN 60-00409</p>	<p><b>06/12/19:</b> On June 9, the UV system was brought back online and the PAA treatment was shutdown. Because of the upset conditions caused by the flooding, LRWRA anticipates that we will not meet the weekly average permit limitations for fecal coliform in the Adams Field effluent for the week of June 2-8. This is likely the only week for which the permit limit for fecal coliform will be exceeded; however, it is also likely that the monthly average for fecal coliform will be exceeded but cannot be calculated until the end of the month.</p> <p><b>06/06/19:</b> Flows remain near 50 MGD.</p> <p>Weekly average results for the flow week of 06/02/19-06/08/19 will be ready early next week. Early results show elevated fecal coliform, likely due to the flow of river water throughout the plant. We are trying to take comparison fecal samples of the Arkansas River near the plant. This plant remains the most impacted from the flood waters.</p> <p><b>06/03/19:</b> Approximately 50 MGD is flowing through the plant at this time; estimates are that 40 MGD is river water and 10 MGD is sewage.</p> <p>River water has entered all parts of the plant through the influent or via the outfall location at the river. We have brown water throughout this plant. We will continue to sample in compliance with our permit and we continue to be compliance with effluent limitations at this time.</p> <p>Due to incursion of flood water into the UV chamber, the UV system was pulled and is not in operation. Peracetic acid (PAA), which has been approved by temporary variance as a supplemental disinfectant at Adams Field, is being used to treat the effluent. The UV system was pulled on Saturday afternoon, June 1, based on emergency conditions. We did not bring in sampling staff on a Sunday to sample PAA residuals. Other than that one day, we are following the sampling requirements of our temporary variance throughout the use of the PAA treatment.</p>
<p><b>Fourche Creek WRF</b>  NPDES Permit No.  AR0040177  AFIN 60-01021</p>	<p><b>06/12/19:</b> Routine operations are in place; no permit violations were observed at FC-WRF.</p> <p><b>06/06/19:</b> Flows also remain high at this plant.</p> <p>Weekly average results for the flow week of 06/02/19-06/08/19 will be ready early next week. Effluent DO has decreased and is currently just meeting the permitted monthly limit. This significant decrease is</p>

	<p>due to the loss of oxygen generation in process stream hydraulic grade line drops due to river backup. We are testing a temporary solution to reintroduce oxygen in the final effluent flow.</p> <p><b>06/03/19:</b> Flow at Fourche Creek is between 38-40 MGD.</p> <p>River water has also entered this plant through the influent and outfall locations, but not to the same extent as at Adams Field. Currently, we are not seeing river water throughout the plant at Fourche Creek.</p> <p>We are currently sampling at all sampling locations in compliance with our permit. We are meeting effluent limits at this time.</p>
<p><b>Little Maumelle WRF</b>  NPDES Permit No.  AR0050849  AFIN 60-04200</p>	<p><b>06/12/19:</b> Routine operations are in place; no permit violations were observed at LM-WRF.</p> <p><b>06/06/19:</b> There is no change at this plant. We are still able to run the Little Maumelle Pump Station on backup generator power.</p> <p><b>06/03/19:</b> Flow through Little Maumelle is around 5-6 MGD. For comparison, flow at Little Maumelle is normally 1.3-1.5 MGD.</p> <p>Gravity discharge is being maintained at the facility. Sampling continues as normal; we are in compliance with all effluent limits.</p> <p>(But note that the Little Maumelle Pump Station is experiencing flood impacts. We are currently able to maintain normal operations, but this may change as waters continue to rise. We will immediately follow-up, if there is any impact to the treatment facility)</p>