

LITTLE ROCK WATER RECLAMATION AUTHORITY
SUMMARY OF SELF MONITORING DATA INVALIDATED BY QC PROTOCOL
SUBMITTED WITH DISCHARGE MONITORING REPORT

Adams Field Water Reclamation Facility

NPDES Permit Number AR0021806 - AFIN 60-00409

Month/Year: July / 2023

Flow Dates	Error Type	Parameter Affected	Reasons for Loss of Self Monitoring Data	Corrective Action(s) Taken	*LRWRA
	Laboratory				C.A.R. No.
07/04/23 07/11/23 07/17/23 07/24/23 07/25/23 07/26/23	X	CBOD	The CBOD GGAC recoveries were outside the acceptable limits of 167.5-228.5 mg/L. All sample results in the runs were invalidated. Samples cannot be recollected, nor retested for the flow weeks. Reasons for the losses are being evaluated internally and explained in the Corrective Actions Taken Section.	<p>From the June QC invalidation summary: <i>The LRWRA Lab has seen CBOD standard results with recoveries near this level recurrently for years now, we will try to locate the issue systematically. We will be changing one variable at a time to see if recoveries improve. The first variables to be explored are: GGA source, seed source, analyst, and nitrification inhibitor.</i></p> <p>July's Summary: Each of the potential sources of error mentioned in June were evaluated.</p> <p>1. Analyst Error - This was ruled out by using three different analysts for each of the three days for two weeks to setup BOD/CBOD. No analyst specific correlation was found.</p> <p>2. GGA Source - GGA standard is currently purchased from NSI. A second and third source of GGA standard were used for test setups. We tested standard from Hach and a solution prepared in-house. No improvement was observed using the alternatives, in fact the NSI standard appeared to outperform the Hach standard.</p> <p>3. Nitrification Inhibitor- Current nitrification inhibitor is Hach brand. A second source of inhibitor was purchased from Lovibond. Any GGA or sample bottle that included the Lovibond inhibitor resulted in a DO of <1 mg/L. While we may look further into the reasons for this, we will continue to use the inhibitor from Hach for the foreseeable future.</p> <p>4. Seed Source- We use a composite sample of the primary effluent from our Adams Field facility as seed. As of late August of 2023, we are in the process of troubleshooting seed material from our Little Maumelle facility as well as Polyseed manufactured by InterLab.</p> <p>*At the time of this document's creation, we have had three weeks of passing BOD/CBOD GGA standards.</p>	2023-011 2023-012 2023-013 2023-014 2023-015 2023-016 2023-017

*A full Corrective Action Report (C.A.R.) is on file at Little Rock Water Reclamation Authority (LRWRA) and is available for review/submittal at any time.

In accordance with the certification statement found in the NPDES Permits issued to Little Rock Water Reclamation Authority (Part II D. 11. c.): 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 person 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.



Signature of Principal Executive Officer or Authorized Agent



Date

Eric Wassell
 Plant Superintendent
 501-490-5402

Rebecca Burkman
 Director of Environmental Affairs
 501-688-1486

Walter B. Collins, P.E.
 Director, Operations and Facilities
 501-688-1429