

Dec 14th 2023

Mary Barnett, Ecologist
Water Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR. 72118-5317

Re: 3rd Qt 2023 Activities Report, Outfall 007 TRE
El Dorado Chemical Company
NPDES Permit # AR 00000752; AFIN 70-00

Dear Ms. Barnett:

As required by the Storm Water Toxicity Reduction Evaluation (TRE) Plan for Outfall 007 (dated 10 August 2023) and in accordance with ADEQ's approval dated 22 August 2023, this letter provides the quarterly activities report for the above referenced TRE.

TRE activities completed during the period from August 1, 2023 through October 31, 2023 include:

- 1) Continued the baseline whole effluent toxicity (WET) testing and analytical chemistry on a monthly basis.
- 2) Initiated the assemblage and tracking of facility discharge data.

Additional details of the completed activities are provided below:

Continued the routine baseline toxicity testing and associated analytical chemistry.

During this period, the routine WET tests were completed monthly at the 1st storm event of each respective month.

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The monthly WET tests results are summarized in the following table:

Date	NOEC	DO	pH	Alkalinity	Hardness	Conductivity	Residual CL	Notes
1/2/2023	46.7	8	4.4	1.1	78	340	<0.05	
2/8/2023	100	7.6	7.3	30	100	480	<0.05	
3/2/2023	100	7.2	6.9	10	170	830	0.09	
4/2- 3/2023	45	6.9	7.1	20	79	390	<0.05	
5/5/2023	45	7.7	7	20	18	94	0.06	
6/10/2023	20.4	7.5	9.2	59	300	1200	>0.05	
6/13/2023	100	7.4	6.6	7.3	140	480	>0.05	ReTest
7/4/2023	100	6	7.2	14	110	610	<0.05	
8/8/2023	32	6.8	6.7	8	110	460	<0.05	
9/4/2023	100	7.7	7	15	150	1400	<0.05	
10/5/2023	45	8	7.6	35	46	180	<0.05	

The August 202023 tests was conducted before the TRE plan was approved.

The September 2023 test passed 100%

The October test result showed a NOEC at a 45% concentration.

A detailed assessment of the October WET. The following parameters stood out.

Nitrate 99 mg/L

Nitrite 0.17 mg/L

Fluoride 5.0 mg/L

Zinc 1.0 mg/L

Aluminum 120mg/L

Sulfate is at 790 mg/L

Other trace metals were also present. Nitrate could be an issue, but the Zinc could also be a problem. However, Zinc toxicity is reduced as Hardness is increased and the effluent water is Hard with Calcium at 150mg/L.

We will be conducting farther review of water samples in future reports.

Additional activities.

In addition to the routine WET testing, collection of additional facility information has been initiated. This information includes but is not limited to facility operations, chemical use data, tracking of internal housekeeping records and documentation of activities within the individual outfall sub-basins.

Future Activities.

Activities planned for the 4th Qt 2023 includes continuation of the routine monthly storm water WET testing, continued monitoring of effluent constituents, tracking of site storm data (duration and magnitude), and discharge volumes. In addition, the assemblage of facility data including the monitoring of routine storm water discharge data with particular attention to facility conditions during the WET monitoring periods will continue.

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Please do not hesitate to contact me if you have any questions or require additional information regarding the implementation of the Outfall 007 TRE.

Respectfully submitted,

Charles McDowell
Environmental Leader