

BEFORE THE ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION

IN THE MATTER OF:
El Dorado Chemical Company
4500 North West Avenue
El Dorado, AR 71730

DOCKET NO.17-001-P
NPDES Permit No. AR0000752
LIS 18-060

PERMIT APPEAL RESOLUTION

This Permit Appeal Resolution (PAR) is entered into for the purpose of resolving this proceeding pursuant to the authority of the Arkansas Water and Air Pollution Control Act, Ark. Code Ann. § 8-4-101, *et seq.*, and the regulations promulgated thereunder. All issues involved in the proceeding have been settled by agreement of El Dorado Chemical Company (EDCC) and the Director of the Arkansas Department of Environmental Quality (ADEQ). It is therefore agreed and stipulated that the following Findings of Fact and Order and Agreement be entered herein.

FINDINGS OF FACT

1. EDCC is a corporation which manufactures anhydrous ammonia, sulfuric acid, nitric acid, ammonium nitrate fertilizers, and industrial grade ammonium nitrate products at its facility located in El Dorado, Union County, Arkansas.
2. EDCC is authorized to discharge treated wastewater into an unnamed tributary of Flat Creek (a/k/a ELCC tributary), pursuant to NPDES Permit Number AR0000752. ADEQ issued its final permitting decision on August 30, 2017, renewing NPDES Permit No. AR0000752 with an effective date of October 1, 2017 ("Permit"). Prior to this Permit, EDCC had been authorized to discharge treated wastewater by NPDES Permit No. AR0000752 issued on February 28, 2007, with an effective date of April 1, 2007 ("2007 Permit").

3. ADEQ included effluent limitations for chlorides, sulfates and total dissolved solids (“Minerals”) and ammonia in the Permit issued on August 30, 2017 as informed by the *TMDLs for Chloride, Sulfate, TDS, and Ammonia in the ELCC Tributary, Arkansas* (October 3, 2002) (“TMDL”).
4. On September 27, 2017 EDCC timely filed a Request for Adjudicatory Hearing and Commission Review (“appeal”) challenging parts of the Permit.
5. EDCC’s appeal included challenges to the following Permit conditions:
 - a. Effluent Limitations for Minerals and ammonia established to implement the TMDL;
 - b. Effluent Limitations for metals and Whole Effluent Toxicity testing requirements;
 - c. Dissolved Oxygen Effluent Limit at Outfall 003;
 - d. The zinc reporting requirement for Outfall 003;
 - e. The monitoring requirements at Outfall 010 for total suspended solids (TSS), carbonaceous biological oxygen demand (CBOD) and total phosphorus (TP); and
 - f. The requirements for monitoring the discharge and in-stream flow measurements for Outfalls 006 and 007.
6. Pursuant to APC&EC Regulation 8.612, the parts of the Permit which are the subject of this appeal shall be stayed, unless otherwise required by state or federal law during the pendency of this appeal; and “[a]ll other final actions of the Director shall remain in effect and the parties shall comply therewith.”

Effluent Limits for Minerals and Ammonia

7. The following Final Effluent Limitations for Minerals and Ammonia are the subject of this appeal, and have been stayed pursuant to APC&EC Regulation 8.612 (collectively referred

to as the “Final Effluent Limitations for Minerals and Ammonia”):

- a. Final Effluent Limitations for Minerals at Outfalls 001, 002, 003, 006 and 007;
 - b. Effluent Limitations for Minerals at Outfall 103ST;
 - c. Final Effluent Limitations for Ammonia at Outfalls 001, 002, 003, 006 and 007;
- and
- d. Effluent Limitations for Ammonia at Outfalls 102ST and 103ST.

8. The Interim Effluent Limitations for Minerals and Ammonia were not appealed and have been in effect during the pendency of this appeal.

9. Since 2002 EDCC has undertaken multiple projects to reduce the loading of Minerals and Ammonia to the ELCC Tributary from those levels present and reported in the TMDL, including reducing the size of the manufacturing area that contributes runoff to the stormwater outfalls, changing the source of makeup water from the mineral rich Sparta aquifer to the Ouachita River, and other source reduction efforts and best management practices, as well as directing the discharge from Outfalls 001 and 002, and a portion of the stormwater runoff previously discharged through Outfalls 004, 005, 006 and 007 to a pipeline that discharges to the Ouachita River.

10. Based on the work undertaken by EDCC since the 2002, EDCC proposed a scope of work designed to collect water quality data in the ELCC Tributary, and other information that can be used to evaluate the condition of the ELCC Tributary that was the subject of the TMDL. EDCC proposed to use this data to re-evaluate the TMDL, including the load and wasteload allocations. Accordingly, ADEQ and EPA agreed to EDCC’s proposed scope of work. The scope of work is currently in the process of being implemented within the ELCC Tributary, the data collection effort should be completed by December 31, 2018, with a report submitted to ADEQ

during the first quarter of 2019 (the “Revised ELCC Tributary Report”).

11. ADEQ and EDCC agree that the Revised ELCC Tributary Report could provide the information required to revise the TMDL. The Revised ELCC Tributary Report could also provide a basis for reassessing the ELCC Tributary’s status under Section 303(d) of the Clean Water Act as an impaired waterbody for Minerals as well as Ammonia. Reassessment can occur when the data from the Revised ELCC Tributary Report is within the period of record for that assessment cycle.

12. ADEQ and EDCC agree that the Final Effluent Limitations for Minerals and Ammonia should be based on the most recent TMDL that EPA has approved. EDCC believes, and ADEQ acknowledges, that the Revised ELCC Tributary Report could serve as a basis for modifying the TMDL. Should EPA approve modifications to the TMDL based on updated information, ADEQ and EDCC will pursue appropriate modifications to the Final Effluent Limitations for Minerals and Ammonia informed by a revised TMDL.

Metals Effluent Limits and Whole Effluent Toxicity

13. The following Effluent Limitations for metals and Whole Effluent Toxicity (WET) testing requirements are the subject of this appeal, and are stayed pursuant to APC&EC Regulation 8.612 (collectively referred to as the “Final Effluent Limitations for Metals and WET Testing Requirements”):

- a. Final Effluent Limitations for metals at Outfalls 001, 002, 006, 007 and 104ST;
- b. Interim Chronic WET Effluent Limitation for Outfall 001;
- c. Interim Chronic Wet testing requirements for Outfalls 002, 006, and 007;
- d. Final Chronic WET Effluent Limitation for Outfall 001; and

e. Final Chronic WET testing requirements for Outfalls 002, 006, 007 and 104ST.

14. The Interim Effluent Limitations for metals at Outfalls 001, 002, 006 and 007, were not appealed, and have been in effect during the pendency of this appeal.

15. EDCC has been conducting WET testing at Outfalls 002, 006 and 007 pursuant to the provisions of the 2007 Permit during the pendency of this Appeal. No WET testing has occurred at Outfall 001 because no discharge has occurred.

16. Pursuant to a condition in a prior version of EDCC's Permit, EDCC completed an evaluation of the background flow of the receiving streams for Outfalls 002, 004, 005, 006 and 007. The Flow Study Report based on that evaluation was submitted on September 21, 2006 ("2006 Flow Study Report"). The goal of the study was to develop a ratio of effluent flow to dilution flow that could be utilized to derive permit conditions and limits that are protective of aquatic life, including WET testing/WET limits.

17. Subsequent to the 2006 Flow Study Report, EDCC has undertaken multiple projects to reduce the size of the manufacturing area that contributes runoff to Outfalls 006 and 007, eliminated Outfalls 004 and 005, and re-directed stormwater from stormwater outfalls to EDCC's wastewater treatment pond, and directed the discharge from the wastewater treatment pond at Outfall 001 to a pipeline that discharges to the Ouachita River, all of which have impacted the ratio of effluent flow to dilution flow derived from the Flow Study Report.

18. Accordingly, ADEQ and EDCC recognize that the facts on the ground have changed and additional effluent flow and background flow data should be collected so that the relationship between the effluent flow and background flow can be developed from current information. EDCC is currently collecting that information for Outfalls 006 and 007. Outfalls 006 and 007

discharge to a streambed (“EDCC’s North Drainage”) with a watershed that is approximately 1.7 square miles. At the point where the EDCC’s North Drainage combines with the tributary for Outfall 001 (“ELCC Tributary”), the combined watershed is approximately 11.5 square miles.

19. EDCC should complete the collection of additional effluent flow and background flow data by December 31, 2019. EDCC will present a report of that data to ADEQ during the first quarter of 2020 (the “Updated Background Flow Report”).

20. Due to the intermittent discharge characteristics of Outfalls 002, 006, 007, and 104ST, ADEQ and EDCC have agreed that the WET testing requirements should be modified. Based on the Chronic WET testing protocols and EPA guidance, EDCC and ADEQ have agreed that EDCC will follow the acute WET testing requirements for discharges of four (4) days¹ or less, and chronic WET testing requirements for discharges that continue for more than four consecutive days. Discharges from Outfall 001 are subject to the chronic WET testing requirements because EDCC controls the duration of those discharges.

21. EDCC and ADEQ have agreed to a resolution of this permit appeal as set forth in this PAR.

22. EDCC and ADEQ have reached agreement as set forth in this PAR on the following issues:

- a. Effluent Limitations for metals and Whole Effluent Toxicity testing requirements.
- b. Dissolved Oxygen Effluent Limit at Outfall 003.
- c. The zinc reporting requirement for Outfall 003.
- d. The monitoring requirements at Outfall 010 for total suspended solids (TSS), carbonaceous biological oxygen demand (CBOD) and total phosphorus (TP).

¹ One day of discharge means any discharge that continues for a consecutive 24 hour period.

e. The requirements for monitoring the effluent flow and background flow measurements for Outfalls 006 and 007.

23. ADEQ and EDCC agree that the information from the Revised ELCC Tributary Report and the Updated Background Flow Report should inform the developments of the Final Effluent Limitations for Minerals and Ammonia and Final Effluent Limitations for Metals and WET Testing Requirements.

ORDER AND AGREEMENT

1. The conditions of the Permit shall be effective as of October 1, 2017, except those permit conditions that were specifically challenged in this appeal as set out in EDCC's Request for Hearing. Until a modified Permit issued pursuant to this PAR is effective, EDCC shall comply with the terms of this PAR.

2. ADEQ and EDCC have agreed to the following:

a. **Interim WET Testing Requirements.** Until a modified Permit issued pursuant to this PAR is effective, EDCC shall fulfill the Interim WET testing requirements as follows:

i. For Discharges at Outfalls 002, 006, and 007 that occur for less than four (4) days, EDCC shall conduct WET testing in accordance with the acute WET testing protocols in EDCC's previous Permit.

ii. For Discharges at Outfalls 002, 006, and 007 that occur for more than four (4) days and for discharges from Outfalls 001, EDCC shall by conduct WET testing in accordance with the WET testing protocols in the appealed Permit.

b. **Dissolved Oxygen Effluent Limit.** The dissolved oxygen limit at Outfall 003 will

go into effect on January 1, 2019, and the Permit should be modified accordingly.

c. **Zinc at Outfall 003.** The zinc reporting requirement for Outfall 003 is eliminated as an Interim and Final limit, and the Permit should be modified accordingly.

d. **Monitoring Requirements for Outfall 010.** On submission of the appropriate data by EDCC, the monitoring requirements for the Outfall 010 effluent limits for total suspended solids (“TSS”), carbonaceous biological oxygen demand (“CBOD”) and total phosphorus (“TP”) will be reduced to three times per week, and the Permit should be modified accordingly.

e. **Flow Measurement.** The discharge and in-stream flow measurements for Outfalls 006 and 007 shall be “Totalizer” for the Interim and Final Limits as of April 1, 2018, and the Permit should be modified accordingly.

3. ADEQ and EDCC agree that a modified Permit with Final Effluent Limitations for Minerals and Ammonia and Final Effluent Limitations for Metals and WET Testing Requirements should not be issued pursuant to this PAR before EDCC has been given time to submit the Updated Background Flow Report and seek EPA’s approval of the Revised ELCC Tributary Report.

4. EDCC shall complete the Revised ELCC Tributary Report and the Updated Background Flow Report in a timeframe consistent with this PAR.

5. EDCC shall submit the Revised ELCC Tributary Report to ADEQ and EPA by March 31, 2019.

6. To the extent that the Revised ELCC Tributary Report results in modifications to the TMDL, ADEQ will propose a modified Permit pursuant to this PAR for public notice and comment containing Final Effluent Limitations for Minerals and Ammonia that are consistent

with the assumptions and requirements of the EPA-approved TMDL and the Revised ELCC Tributary Report as required by federal regulations.

7. EDCC shall submit the Updated Background Flow Report to ADEQ by March 31, 2020.

8. To the extent that the Updated Background Flow Report develops the relationship between the effluent flow and background flow, ADEQ will propose a modified Permit pursuant to this PAR for public notice and comment containing Final Effluent Limitations for Metals and WET Testing Requirements consistent with the data presented in the Updated Background Flow Report and any applicable state or federal regulations.

9. ADEQ and EDCC agree that this PAR does not limit ADEQ from using additional, relevant data in conjunction with the Revised ELCC Tributary Report and the Updated Background Flow Report to develop the modified Permit issued pursuant to this PAR.

10. Within thirty (30) days of the execution of this PAR, EDCC shall provide ADEQ with the preliminary data that has been collected for the Revised ELCC Tributary Report and the Updated Background Flow Report.

11. Within sixty (60) days of the execution of this PAR, ADEQ and EDCC shall meet to discuss the Revised ELCC Tributary Report, the Updated Background Flow Report, Final Effluent Limitations for Minerals and Ammonia, and the Final Effluent Limitations for Metals and WET Testing Requirements. ADEQ and EDCC agree to hold additional meetings as necessary.

12. This PAR shall in no way limit the right of EDCC to comment on or appeal the terms of the modified permit issued pursuant to this PAR if the modified permit differs in any respect from the agreed terms and conditions set forth in this PAR.

13. Assuming timely completion of the reports and EPA approval of a modified TMDL as set out above, ADEQ will propose a modified Permit for public notice and comment containing Final Effluent Limitations for Minerals and Ammonia and Final Effluent Limitations for Metals and WET Testing Requirements before December 31, 2020. The modified permit is subject to the terms and conditions of this PAR within the constraints of state and federal law.

14. The PAR and modified permit are subject to public review and comment. ADEQ retains the right and discretion to set aside the PAR based on comments received within the thirty (30) day public comment period. If the PAR is set aside, El Dorado Chemical Company's appeal shall be simultaneously reinstated. Subject to the foregoing, and in accord with APC&EC Reg. 8.615(A), the Request for Commission Review and Adjudicatory Hearing in this matter is hereby withdrawn. EDCC retains its right to comment on or appeal the terms of the modified permit issued pursuant to this PAR.

15. The PAR and the resulting permit modifications are contingent upon final approval from the United States Environmental Protection Agency (US EPA) Region 6.

16. The undersigned representative of El Dorado Chemical Company certifies that he or she is an officer of El Dorado Chemical Company, being duly authorized to execute and bind El Dorado Chemical Company to the terms and conditions contained herein. Execution of the PAR by an individual other than an officer of El Dorado Chemical Company shall be accompanied by a resolution granting signature authority to the individual as duly ratified by the governing body of the corporation.

ENTERED into this 6 day of July, 2018.

Becky W. Keogh
Becky W. Keogh, Director
Arkansas Department of Environmental Quality

EL DORADO CHEMICAL COMPANY
By and through its duly authorized representative

John M. Carver 7-2-18
JOHN M. CARVER Vice President