BEFORE THE ARKANSAS COMMISSION ON POLLUTION CONTROL AND ECOLOGY

IN THE MATTER OF:

El Dorado Chemical Company
4500 North West Avenue
El Dorado, AR 71730

DOCKET NO.17-___-P

NPDES Permit No. AR0000752

REQUEST FOR ADJUDICATORY HEARING AND COMMISSION REVIEW

Pursuant to Ark. Code Ann. 8-4-205 and APCEC Regulation No. 8, Reg. 8.603, El Dorado Chemical Company ("EDCC"), by its attorneys, Barber Law Firm, PLLC, hereby requests an adjudicatory hearing and the opportunity to present evidence and oral argument before the Arkansas Commission on Pollution Control and Ecology (the "Commission") regarding NPDES Permit No. AR0000752, issued to EDCC on August 30, 2017, for the reasons enumerated below. (the "Appeal").

General Background: Factual and Legal Matters Applicable to All Issues

1. EDCC owns and operates a chemical manufacturing facility in El Dorado, Arkansas which manufactures sulfuric acid, nitric acid, ammonium nitrate fertilizers, anhydrous ammonia, and industrial grade ammonium nitrate products. EDCC operates a wastewater treatment system pursuant to Arkansas State NPDES Permit Number AR0000752.
2. On February 8, 2017 ADEQ issued a Draft Permit to renew the existing NPDES Permit Number AR0000752 for public comment. NPDES Permit No. AR0000752 issued on February 28, 2007, effective April 1, 2007 (the "2007

Permit") is attached hereto as Exhibit A and incorporated herein. The Draft Permit was published for a 30-day comment period, and EDCC timely filed comments. ADEQ issued its final permitting decision on August 30, 2017, renewing NPDES Permit No. AR0000752 effective October 1, 2017 (the "Permit"). A copy of the Permit is attached hereto as Exhibit B and incorporated herein. This Appeal is taken from the final permitting action of the Director, and EDCC is hereby appealing specific conditions and limitations contained in the Permit, as more particularly described below (the "Appeal"). Accordingly, the specific conditions and limitations appealed from are stayed by operation of Regulation No. 8, Section 8.612, pending the resolution of this Appeal, as more particularly described below.

3. Through this action, EDCC requests an adjudicatory hearing and Commission review with respect to the specific issues enumerated below. EDCC requests that the Commission find that the Director's permitting decision with respect to these issues is arbitrary, capricious, not supported by substantial evidence, and contrary to the Commission's rules and its governing statutory authority. EDCC requests that the Commission find that ADEQ has failed to include in the written record of this proceeding a written explanation of the rationale for the proposed effluent limitations and conditions which are the subject of the issues identified below, and that ADEQ has failed to adequately respond to the comments filed by EDCC on the draft permit, and that ADEQ has failed to provide an adequate written explanation of the rationale for the proposed effluent limitations and conditions that are the subject of the Appeal as identified below, and that ADEQ has failed to

demonstrate that the effluent limitations and conditions that are the subject of the Appeal as identified below are based upon generally accepted scientific knowledge and engineering practices, all as required by Regulation No. 8, Section 8.211(A)(2).

ISSUE NO. 1-THE FINAL DISSOLVED MINERAL CONCENTRATION LIMITS ARE NOT APPROPRIATE

4. The contents of paragraphs 1-3 are incorporated herein.

5. Outfalls 002, 006 and 007 as described in the Permit are infrequent, rain induced, sources of discharge.

6. The Permit includes final, numerical dissolved mineral concentration limits for Outfalls 002, 006 and 007, as well as final dissolved mineral mass limits for Outfall 103ST which represents the total flow from Outfalls 002, 006 and 007. All of the dissolved mineral limits in the Permit were based on the *TMDLs for Chloride, Sulfate, TDS, and Ammonia in the ELCC Tributary, Arkansas* (October 3, 2002). ("TMDL"). A copy of the TMDL is is attached hereto as Exhibit C and incorporated herein. Permit Fact Sheet, Page 5 (Outfall 002); Page 7 (Outfalls 006 and 007); Page 8 (Outfall 103ST). See also Permit, Page 7 of Part IA, footnote 3 (Outfall 002); Page 12 of Part IA, footnote 5 (Outfall 006); and Page 14 of Part IA, footnote 5 (Outfall 007).

7. ADEQ states that the dissolved mineral limits were included in the Permit because "concentration and mass limits based upon the TMDL must be included in the permit in accordance with 40 CFR 122.44(d)(1)(vii)(B)." Page 29 of Fact Sheet. 40 CFR 122.44(d)(1)(vii)(B) requires that permit limits be "consistent with the assumptions and requirements of any available wasteload allocation."

There is no wasteload allocation in the TMDL for dissolved minerals in the EDCC storm water. As a result, 40 CFR 122.44(d)(1)(vii)(B) does not apply directly.

8. When the data for the TMDL was being gathered, and the TMDL was being written, EDCC was in the process of re-routing storm water, some to treatment and some to newly created Outfalls 006 and 007, which had not yet been permitted. Outfalls 006 and 007 were first permitted when the NPDES Permit was renewed on May 31, 2002. It appears that the TMDL listed EDCC's storm water outfalls as part of the "Load Allocation" because they were not permitted at the time that the TMDL was being written. EPA's 2014 guidance does provide that a Load Allocation applied to a storm water source that will be subsequently permitted should be treated as a Wasteload Allocation when it is permitted. This renewal Permit is the first time that the TMDL is being implemented for the EDCC storm water. It should be noted that the same EPA guidance requiring Load Allocations for unpermitted storm water sources to be treated as Wasteload Allocations when permitted, also provides the following guidance regarding implementing a Wasteload Allocation for a storm water source in an NPDES Permit:

> As stated in the 2002 memorandum, where a State or EPA has established a TMDL, NPDES permits must contain effluent limits and conditions consistent with the assumptions and requirements of the WLAs in the TMDL. See 40 CFR 122.44(d)(1)(vii)(B). Where the TMDL includes WLAs the storm water sources that provide numeric pollutant loads, the WLA should, where feasible be translated into effective, measurable WQBELs that will achieve this objective. This could take the form of a numeric limit, or of a measurable, objective BMP-based limit that is projected to achieve the WLA. . . .

> The permitting authority's decision as to how to express the WQBELs, either as numeric effluent limitations or as BMPs, with clear, specific, and measurable elements, should be based on an analysis of the specific facts and circumstances surrounding the permit, and/or the underlying WLA, including the nature of the storm water discharge, available data, modeling results, and other relevant information. As discussed in the 2002 memorandum, the permit's administrative record needs to provide an adequate demonstration that, where a BMP-based approach to permit limitations is selected, the BMPs required by the permit will be sufficient to implement applicable WLAs. Permits should also include milestones or other mechanisms where needed to ensure that the progress of implementing BMPs can be tracked. Improved knowledge of BMP effectiveness gained since 2002 should be reflected in the demonstration and supporting rationale that implementation of the BMPs will attain water quality standards and be consistent with WLAs.

A copy of the 2014 EPA Guidance, *Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on those WLAs,* is attached hereto as Exhibit D and incorporated herein. ("2014 Guidance")

9. The Permit does not properly implement the TMDL.

10. The TMDL established annual average Load Allocations for minerals in the EDCC storm water. A Load Allocation is defined as follows:

> **"Load allocation (LA).** The portion of a receiving water's loading capacity that is attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources. Load allocations are best estimates of the loading, which may range from reasonably accurate estimates to gross allotments, depending on the availability of data and appropriate techniques for predicting the loading. Wherever possible, natural and nonpoint source loads should be distinguished." 33 USC 1251

11. The Load Allocations were based on the annual average concentration of dissolved minerals in the EDCC storm water, calculated from data available at the time, which was 62.9 mg/L chlorides, 88.3 mg/L sulfates, and 1878 mg/L TDS. The TMDL was also based on a flow derived from annual average rainfall data,

with runoff coefficients to calculate the annual average runoff for the USGS gage on Smackover Creek, which was 15" of runoff per year, applied to the then present manufacturing area that contributed runoff to the storm water outfalls, which was 300 acres, which produced an average annual storm water flow of 0.33 million gallons per day ("MGD"). Based on these assumptions, the annual load of dissolved minerals from the EDCC storm water outfalls when the TMDL was written was 173 lbs/day chlorides, 243 lbs/day sulfates, and 5169 lbs/day TDS. The TMDL then applied the required percentage reductions in loadings from the EDCC storm water to develop the annual average Load Allocations for the EDCC storm water, which were 73 lbs/day chlorides, 33 lbs/day sulfates, and 635 lbs/day TDS.

12. The TMDL Load Allocations for minerals in the EDCC storm water are expressed as annual average mass loads. The Permit inappropriately applies the TMDL annual average mass loads through Permit limits establishing monthly average and daily maximum concentrations for Outfalls 006 and 007, and as monthly average and daily maximum mass loadings for Outfall 103ST. The only permit limit that is appropriate for minerals in the EDCC storm water to implement the annual average Load Allocation in the TMDL is an annual average mass limit for Outfall 103ST. The Permit included a mass limit of 73 pounds per day chlorides, 33 pounds per day of sulfate and 635 pounds per day of total dissolved solids ("TDS"). A mass permit limit expressed on a frequency other than an annual average, and a permit limit expressed as a concentration of any frequency are not

consistent with the TMDL, do not reflect or properly implement the Load Allocations for dissolved minerals in the TMDL, and are not appropriate.

13. EDCC has undertaken multiple projects to reduce the loading of dissolved minerals from those levels present and reported in the TMDL, including reducing the size of the manufacturing area that contributes runoff to the storm water outfalls, changing the source of makeup water from the mineral rich Sparta aquifer to the Ouachita River, and other source reduction efforts, as well as implementation of other best management practices that have reduced EDCC sources of mineral loadings. As a result of these efforts, recent data collected since the TMDL was completed demonstrates that EDCC has, in fact, achieved the TMDL Load Allocations for dissolved minerals, such that the current annual average mass loadings are 0.491 lbs/day chlorides, 12.2 lbs/day sulfates and 81.3 lbs/day TDS. These values represent not only compliance with the Load Allocations in the TMDL, but substantial reductions below the TMDL Load Allocations, as shown below:

	Chloride (lbs)	**Sulfate (lbs)**	**TDS (lbs)**
Current Mass Loadings	0.491	12.2	81.3
TMDL Load Allocation	73	33	635

Furthermore, EDCC has reduced the contribution of minerals from Outfall 001 by more than the amount required by the TMDL Wasteload Allocation for Outfall 001 by eliminating Outfall 001, thereby substantially reducing the load of dissolved minerals below the TMDL required values, as shown below:

	Chloride (lbs)	Sulfate (lbs)	TDS (lbs)
Current Mass Loadings	0.00	0.00	0.00
TMDL Wasteload Allocation	265	503	1338

EPA guidance authorizes trading between wasteload allocations through an NPDES permitting action. See, *Considerations for Revising and Withdrawing TMDLs* ("TMDL Trading Guidance", page 7. ("TMDL Trading Guidance") EPA has applied this guidance in other NPDES permitting actions in Arkansas. A copy of the TMDL Trading Guidance, and EPA's approval of the use of this approach, are attached hereto as Exhibit E and incorporated herein.

14. The TMDL calculated the total wasteload for all EDCC sources of dissolved minerals that contributed to the EDCC tributary that would be allowable to achieve compliance with the TMDL. EPA guidance authorizes trading between wasteload allocations (such as Outfall 001) and other wasteload allocations or load allocations that have been permitted and become wasteload allocations (such as Outfalls 002, 006 and 007). If ADEQ had authorized such trading by implementing the TMDL through the same watershed approach used by the TMDL, it would become obvious that EDCC has more than achieved the dissolved mineral reductions required to implement the TMDL. There has been more than enough dissolved mineral load removed through the elimination of Outfall 001 to implement the TMDL, and no dissolved mineral permit limits are required or necessary to implement the TMDL with respect to dissolved minerals.

15. To the extent that a permit limit is required, the most appropriate permit condition for implementing the TMDL would be a permit condition that (1) acknowledges the successful implementation of the dissolved mineral wasteload reduction required by the TMDL, and acknowledges the further elimination of the dissolved mineral wasteload allocation for Outfall 001, by directing the entire Outfall 001 discharge to Outfall 010 (i.e. the El Dorado Pipeline), and (2) eliminates Outfall 103ST and substitutes a summary outfall that represents the combined flow in Outfalls 001, 002, 003, 006 and 007, with a "Report" requirement for the combined mass of dissolved minerals discharged from Outfalls 001, 002, 003, 006 and 007.

16. To the extent that the TMDL requires a numerical limit for the mass of dissolved minerals to demonstrate that the mass of dissolved minerals remains less than the TMDL total allowable load, the manner in which ADEQ has imposed numerical mass dissolved mineral limits in the Permit is not consistent with the assumptions and requirements of the TMDL.

17. The TMDL states that the allowable dissolved mineral load to the EDCC tributary from all sources (Outfalls 001, 002, 003, 006 and 007) should not exceed 338 lbs/day Chlorides, 536 lbs/day Sulfates, and 1973 lbs/day TDS. TMDL page 4-3, Table 4-1 (EDCC non-storm water and storm water sources combined).

18. In order to implement the TMDL with respect to all dissolved mineral sources, Outfall 103ST should be revised to reflect a single summary outfall that represents the total allowable load from all EDCC dissolved mineral point sources; i.e. Outfalls 001, 002, 003, 006 and 007. This would result in a single

permit limit for the combined total allowable dissolved mineral mass load of 338 lbs/day Chlorides, 536 lbs/day Sulfates, and 1973 lbs/day TDS.

19. To the extent that numerical concentration effluent limits are required for the point sources of dissolved minerals (Outfalls 001, 002 and 003), ADEQ calculated those concentration limits appropriately, based on assumed continuous discharges that would occur during critical flow conditions from Outfalls 001, 002 and 003, which an unrealistic for Outfalls 001 and 002, given the current conditions that will allow storage of wastewater from Outfalls 001 and 002 during critical conditions, and limit discharge events to short term events—less than five (5) days.

20. To the extent that numerical concentration effluent limits are required for the point sources of dissolved minerals (Outfalls 006 and 007), ADEQ did not appropriately calculate those concentration effluent limits, using the current in stream dissolved mineral water quality criteria and the Background Flow Study. Any dissolved mineral concentration limit for Outfalls 006 and 007 should be based on the current in stream dissolved mineral water quality criteria and the Background Flow Study to establish appropriate water quality based concentration effluent limits for dissolved minerals for Outfalls 006 and 007.

21. Accordingly, the Interim dissolved mineral concentration limits for Outfalls 001, 002, 003, 006 and 007, which are not the subject of this Appeal, remain in effect pending the resolution of this Appeal; the numerical Final dissolved mineral concentration limits for Outfalls 001, 002, 003, 006 and 007 are stayed pending

the resolution of this Appeal; and the Final dissolved mineral mass limits for Outfall 103ST are stayed pending the resolution of this Appeal.

ISSUE NO. 2-THE NUMERICAL WATER QUALITY BASED PERMIT LIMITS FOR OUTFALLS 001, 002, 003, 006, 007, AS WELL AS FOR THE SUM OUTFALLS 102ST, 103ST, AND 104ST THAT ARE BASED ON PROTECTION OF AQUATIC LIFE USES SHOULD NOT BE APPLIED DURING THE CRITICAL PERIOD

22. ADEQ has imposed water quality based effluent limits that are based on protection of aquatic life uses. In particular, these effluent limits that are the subject of this Issue Number 2 are:

> NH3-N effluent limits at Outfalls 001, 002, 003, 006, 007 (Final concentration limits for April-October), 101ST (Interim mass limits that apply year round); 102ST and 103ST (Mass limits for April-October).
>
> Metals effluent limits at Outfalls 001, 002, 104ST (Final concentration limits that apply year round);
>
> Critical season WET Limits at Outfalls 001, and critical season biomonitoring requirements at Outfalls 002 and 104ST (requirements that apply year round rather than just during the seasonal period).

23. Regulation No. 2 provides that streams with watersheds of less than 10 square miles in the Gulf Coast Ecoregion have a "Seasonal Gulf Coast aquatic life" use. Reg. 2, Appendix A-30. The receiving streams for Outfalls 001, 002, 003, 006, 007, 101ST, 102ST, 103ST and 104ST all have a watershed size of less than 10 square miles. Accordingly, there is no aquatic life use in those watersheds during the critical season, and it is not appropriate to impose water quality based effluent limits or biomonitoring requirements to implement water quality criteria that were established to protect aquatic life uses during the critical season when those uses are not present in the receiving stream during the critical season.

24. The following effluent limits are stayed pending the resolution of this Appeal:

NH3-N effluent limits at Outfalls 001, 002, 003, 006, 007 (Final concentration limits for April-October), 101ST (Interim mass limits that apply year round); 102ST and 103ST (Mass limits for April-October).

Metals effluent limits at Outfalls 001, 002, 104ST (Final concentration limits that apply year round);

Critical season WET Limits at Outfalls 001, and the critical season chronic biomonitoring requirement at Outfalls 002 and 104ST.

ISSUE NO. 3-THE FINAL AMMONIA LIMITS FOR OUTFALLS 001, 002, 003, 006, 007, 102ST AND 103ST ARE NOT APPROPRIATE

25. The contents of paragraphs 1-3 are incorporated herein.

26. Outfalls 002, 006 and 007 as described in the Permit are infrequent, rain induced, sources of discharge. Outfall 001 is an infrequent source that only discharges during prolonged periods of time that Outfall 010 (the El Dorado pipeline) is not available, an event that has never occurred since the El Dorado pipeline became available in September of 2013. Outfall 003 is the only continuous source of discharge that contributes NH3-N to the watershed of the EDCC tributary. Outfall 102ST is a summary outfall represents the total flow from Outfalls 001and 003. Outfall 103ST is a summary outfall that represents the total flow from Outfalls 002, 006 and 007.

27. The Permit includes final, numerical ammonia ("NH3-N") concentration limits for Outfalls 001, 002, 003, 006 and 007; as well as final, numerical NH3-N mass limits for and Outfalls 102ST and 103ST. The Permit states that all of these NH3-N limits are based on the TMDL.

(a) The NH3-N Mass Limits for Outfall 102ST and 103ST Are Not appropriate.

28. The Permit states that the mass limits for Outfalls 102ST and 103ST are based on the TMDL. Permit, Page 8 of Fact Sheet.

29. The Permit also states that the mass NH3-N limits were included in the Permit because "concentration and mass limits based upon the TMDL must be included in the permit in accordance with 40 CFR 122.44(d)(1)(vii)(B)." Page 29 of Fact Sheet. 40 CFR 122.44(d)(1)(vii)(B) requires that permit limits be "consistent with the assumptions and requirements of any available wasteload allocation." The Permit did not appropriately establish NH3-N mass effluent limits, consistent with the assumptions and requirements of the TMDL.

30. The TMDL only calculated NH3-N mass wasteload allocations for the three point sources (EDCC Outfall 001, Wildwood Trailer Park and City of Norphlet), and only required wasteload reductions from EDCC Outfall 001. In particular, the TMDL required 98% reduction in mass NH3-N from EDCC Outfall 001 during the summer, and 95% reduction in mass NH3-N from Outfall 001 during the winter to achieve compliance with the TMDL. Accordingly, the TMDL wasteload allocation for EDCC's Outfall 001 was set at 37.9 lbs/day (Summer) and 85.78 lbs/day (Winter). TMDL, page 4-9. In order to implement the TMDL, ADEQ was only required to implement permit limits that would insure that the NH3-N load from Outfall 001 achieved the wasteload allocation in the TMDL. See, TMDL, page 5-1 ("Point source reductions for these TMDLs will be implemented through the NPDES program, which is administered in Arkansas by ADEQ.")

31. The TMDL did not require any reductions in NH3-N mass loadings from the nonpoint sources (including the EDCC storm water outfalls), and as a result ADEQ was not required by the TMDL to impose NH3-N limits that would reduce the mass NH3-N loadings from Outfalls 002, 006 or 007. The TMDL approach, which was to require NH3-N wasteload reductions only from EDCC Outfall 001, was described in the TMDL as appropriate "because the nonpoint source contributions from that watershed are small compared to the contributions from point sources." TMDL, page 4-9.

32. EDCC has reduced the contribution of NH3-N from Outfall 001 by more than the amount required by the TMDL Wasteload Allocation by eliminating the NH3-N load from Outfall 001, thereby reducing the load of NH3-N below the TMDL required values, as shown below:

Outfall 001	**NH3-N Summer (lbs)**	**NH3-N Winter (lbs)**
Current Mass Loadings	0.00	0.00
TMDL Wasteload Allocation	37.9	85.78

33. The TMDL calculated the total NH3-N wasteload for all EDCC sources of NH3-N that contributed to the EDCC tributary (including background and the EDCC storm water outfalls) that would be allowable to achieve compliance with the TMDL. EPA guidance authorizes trading between wasteload allocations (such as Outfall 001) and other wasteload allocations or load allocations that have been permitted and become wasteload allocations (such as Outfalls 002, 003, 006 and 007). If ADEQ had authorized such trading by implementing the TMDL through

the same watershed approach used by the TMDL, it would become obvious that EDCC has more than achieved the NH3-N reductions required to implement the TMDL. There has been more than enough NH3-N load removed through the elimination of Outfall 001 to implement the TMDL, and no NH3-N permit limits are required or necessary to implement the TMDL with respect to NH3-N.

34. To the extent that a permit limit is required, the most appropriate permit condition for implementing the TMDL would be a permit condition that (1) acknowledges the successful implementation of the NH3-N wasteload reduction required by the TMDL, and acknowledges the further elimination of the NH3-N wasteload allocation for Outfall 001, by directing the entire Outfall 001 discharge to Outfall 010 (i.e. the El Dorado Pipeline), and (2) eliminates Outfalls 102ST and 103ST and substitutes a summary outfall that represents the combined flow in Outfalls 001, 002, 003, 006 and 007, with a "Report" requirement for the combined mass of NH3-N discharged from Outfalls 001, 002, 003, 006 and 007.

35. To the extent that the TMDL requires a numerical limit for the mass of NH3-N to demonstrate that the mass NH3-N remains less than the TMDL total allowable load, the manner in which ADEQ has imposed numerical mass NH3-N limits in the Permit is not consistent with the assumptions and requirements of the TMDL.

36. The TMDL states that the allowable NH3-N load to the EDCC tributary from all sources (Outfalls 001, 002, 003, 006 and 007 as well as background) should not exceed 37.9 lbs/day Summer and 87.5 lbs/day Winter. TMDL page 4-9, Table 4-2, Table F.2 (EDCC downstream load).

37. In order to literally implement the TMDL with respect to all NH3-N sources, Outfalls 102ST and 103ST should be combined to a single summary outfall that represents the total allowable load from all EDCC NH3-N point sources; i.e. Outfalls 001, 002, 003, 006 and 007. This would result in a single permit limit for the combined total allowable NH3-N mass load of 37.9 lbs/day Summer and 87.5 lbs/day Winter (which includes an allocation for the TMDL assumed background NH3-N load of 0.0 lbs/day Summer and 1.72 lbs/day Winter). TMDL, Table F.2. As explained in Paragraph 51 below, this literal implementation of the TMDL is not consistent with the assumptions of the TMDL and Commission rules, and when the appropriate Winter temperature adjustments are made the Winter NH3-N load is 355 lbs/day.

38. The NH3-N mass limits for Outfall 102ST and 103ST are stayed pending the resolution of this Appeal.

(b) <u>The Final NH3-N Concentration Limits Are Not appropriate.</u>

39. The Permit imposes final, monthly average NH3-N concentration limits of 2.43 mg/L (Summer) and 5.5 mg/L (Winter) for Outfalls 001 and 003, with daily maximum values of 3.65 mg/L (Summer) and 8.25 mg/L (Winter). The Permit imposes final, monthly average NH3-N concentration limits of 0.0 mg/L (Summer) and 0.32 mg/L (Winter) for Outfalls 002, 006 and 007, with daily maximum values of 0.0 mg/L (Summer) and 0.48 mg/L (Winter).

40. The permit reflects that all of the final NH3-N concentration limits were "based on the TMDL." Permit, Page 4 of Fact Sheet (Outfall 001); Page 5 of Fact Sheet

(Outfall 002); Page 6 of Fact Sheet (Outfall 003); Page 7 of Fact Sheet (Outfalls 006 and 007).

41. The TMDL did not require numerical NH3-N concentration limits to be included in the Permit, and the NH3-N concentration limits that are included in the Permit are not consistent with the assumptions of the TMDL.

42. The TMDL was written to eliminate ammonia toxicity to aquatic life from the EDCC tributary. TMDL, Page 3-2.

43. The TMDL does not independently establish an allowable effluent concentration for any EDCC point source, and the TMDL does not require an NH3-N concentration limit for any NH3-N source to implement the TMDL.

(c) <u>The Final NH3-N Concentration Limits for Outfalls 001 and 003 Are Not appropriate.</u>

44. As part of a mass balance calculation, The TMDL calculated an allowable in-stream NH3-N concentration to protect against ammonia toxicity in the EDCC tributary of 2.43 mg/L Summer and 4.17 mg/L Winter, and used those values in a mass balance equation to calculate the waste load reductions required for EDCC Outfall 001. The TMDL back-calculated an effluent concentration, based on the seasonal (Summer and Winter) average mass load divided by an assumed seasonal low flow. This back-calculation of concentration, which yielded 2.43 (Summer) and 5.5 mg/L (Winter) for the EDCC Outfalls 001 and 003, was performed as part of the mass balance calculation undertaken to calculate the percentage NH3-N reduction required from Outfall 001, and has absolutely nothing to do with determining what effluent concentration might be required from any particular source to prevent in-stream ammonia toxicity.

45. For Outfalls 001 and 003, ADEQ inappropriately selected the concentration values, back-calculated as part of the TMDL mass balance calculation, and imposed those values as Permit effluent concentration limits "required by the TMDL." Nowhere does the TMDL require such action.

(d) The Final NH3-N Concentration Limits for Outfalls 002, 006 and 007 Are Not Appropriate.

46. The TMDL averaged five (5) NH3-N readings between March and December of 1997 at Monitoring Station OUA137A, located upstream of the EDCC facility, to calculate an average, year round, background concentration of NH3-N in the El Dorado tributary watershed of 0.32 mg/L. The average concentration of NH3-N upstream of the EDCC facility has absolutely nothing to do with determining what effluent concentration might be required from any particular source to prevent in-stream ammonia toxicity.

47. For Outfalls 002, 006 and 007, ADEQ inappropriately selected 0.0 mg/L (Summer) and 0.32 mg/L (Winter) as effluent concentration values "required by the TMDL" to be implemented as permit limits. The TMDL found that the average background concentration was 0.32 mg/L year-round and ADEQ's selection of 0.0 mg/L for the Summer was not even consistent with the TMDL average concentration, which was an average of year-round values and represented a year-round NH3-N background concentration value, Summer and Winter.

48. ADEQ's decision to impose NH3-N concentration effluent limits for Outfalls 002, 006 and 007 of 0.0 mg/L (Summer) and 0.32 mg/L (Winter), is not appropriate and has no basis in the TMDL, regulation or other scientific source.

(e) An Appropriate Chronic NH3-N Concentration Limit for Outfall 003 Must be Consistent with the Assumptions of the TMDL and Commission Rules.

49. The discharge flows from Outfall 003 is continuous. To the extent in stream ammonia toxicity must be protected through a numeric concentration permit limit, the chronic ammonia toxicity values, as used in the TMDL and Regulation No. 2, are the appropriate values.

50. The TMDL assumed a Winter temperature of 22.0 degrees Centigrade (C) when calculating the appropriate NH3-N in-stream concentration value to avoid ammonia toxicity. TMDL Table F.1. The Commission has established 14 degrees C as the appropriate winter temperature for streams in the Gulf Coastal Ecoregion. Regulation No. 2, Section 2.502. Therefore, to establish an ammonia toxicity permit limit, consistent with the assumptions of the TMDL and Regulation No. 2, The Regulation No. 2 Winter temperature is required to calculate the appropriate value. Accordingly, the appropriate chronic in-stream NH3-N concentration for continuous discharges is 2.43 (Summer) and 6.8 mg/L (Winter). Any NH3-N concentration limit for Outfall 003 should be based on protection of the chronic ammonia toxicity values of 2.43 (Summer) and 6.8 mg/L (Winter).

(f) An Appropriate NH3-N Concentration Limit for Outfalls 001, 002, 006 and 007 Must be Consistent with the Assumptions of the TMDL and Commission Rules.

51. The discharge flows from Outfalls 001, 002, 006 and 007 are infrequent and typically less than 48 hours. Accordingly, the appropriate in-stream NH3-N concentration for short term discharges (less than seven days) should be based on protection of the in-stream, acute ammonia toxicity value of 6.1 mg/L (Summer)

and 17 mg/L (Winter), which are applied to a permit as a 7 day average. Regulation No. 2, Section 2.512. Accordingly, any concentration values imposed as permit limits for Outfalls 001, 002, 006 or 007 must be based on the acute ammonia toxicity values from Regulation No. 2, 6.1 mg/L (Summer) and 17 mg/L (Winter), applied as a 7 day average. The TMDL assumed that the Winter temperature was 22 degrees C when calculating the wasteload allocation. Accordingly, utilizing the appropriate in-stream ammonia toxicity value for the Winter of 17 mg/L would also increase the allowable Winter NH3-N load that would be applied at the summary outfall for Outfalls 001, 002, 003, 006 and 007 to 355 pounds per day.

52. The Interim NH3-N concentration limits for Outfalls 001, 002, 003, 006 and 007 are not the subject of this Appeal and remain in effect during the pendency of this Appeal. The Final NH3-N concentration limits for Outfalls 001, 002, 003, 006 and 007 are stayed pending the resolution of this Appeal.

ISSUE NO. 4- CHRONIC BASED AQUATIC LIFE WATER QUALITY CRITERIA ARE NOT APPROPRIATE FOR OUTFALL 104ST, AND CHRONIC WET TESTING IS NOT APPROPRIATE FOR OUTFALLS 002, 006 AND 007.

53. The contents of paragraphs 1-3 are incorporated herein.

54. Outfalls 002, 006 and 007 are infrequent, precipitation induced, sources of discharge.

55. The Permit imposes monthly average and daily maximum concentration limits for total recoverable lead and total recoverable zinc at Outfall 104ST. These permit limits were established by applying the chronic toxicity water quality criteria for

metals. Page 22 of Fact Sheet, Page 50 of Fact Sheet. Due to the short, intermittent nature of discharges from the outfalls that comprise Outfall 104ST, the use of chronic aquatic life criteria for metals is not appropriate. ADEQ should have applied the acute aquatic life criteria, and had ADEQ done so its own reasonable potential calculations demonstrated that there is no reasonable potential for an exceedance of the acute water quality criteria for total recoverable lead or total recoverable zinc at Outfall 104ST. Accordingly, there should be no numeric effluent limit for total recoverable lead or total recoverable zinc at Outfall 104ST.

56. The Permit imposed a new interim and final WET effluent limit based on chronic biomonitoring at Outfall 002, and required a new final WET testing requirement based on chronic biomonitoring at Outfall 104ST in lieu of interim or final WET testing requirements at Outfalls 006 and 007. The 2007 Permit imposed acute biomonitoring for Outfalls 002, 006 and 007, which is the appropriate biomonitoring protocol for short term, precipitation induced, storm water outfalls. The acute biomonitoring permit condition was also the result of Permit Appeal Resolution No. LIS 03-067 whereby ADEQ agreed that acute biomonitoring was the appropriate protocol, by agreeing that "The toxicity testing requirements for the storm water outfalls, Outfalls 002, . . . 006 and 007 will be revised to provide for acute instead of chronic toxicity testing". Due to the short, intermittent nature of discharges from these outfalls, chronic testing remains neither appropriate nor technically feasible.

57. The USEPA's chronic testing protocols for holding times cannot be maintained, and the results of any chronic testing would be invalid.

58. In order to impose a chronic WET limit for Outfall 001, and chronic WET testing requirements for Outfalls 002 and 104ST, ADEQ has "waived" the holding times for chronic WET testing of the effluent from Outfalls 001, 002 and 104ST. The Director lacks authority to "waive" the holding times for an EPA approved test method, the results of chronic WET testing that is not performed in accordance with the EPA approved test method are not valid, and the Director has not demonstrated that the results of a chronic WET test that does not comply with the EPA approved test method, including holding times, is an appropriate test that presents scientifically valid results.

59. The interim and final chronic WET limit for Outfall 001 is not appropriate, should be eliminated, and is stayed pending the resolution of this Appeal, however, since the 2007 Permit included the same chronic WET limit, that limit remains in effect pending the resolution of this Appeal. The interim and final chronic WET testing requirement for Outfall 002 is not appropriate, should be eliminated, and is stayed pending the resolution of this Appeal, and the acute WET testing requirement for Outfall 002 remains in effect pending the resolution of this Appeal. The interim and final chronic WET testing requirement for Outfalls 006 and 007 are not appropriate, should be eliminated, and are stayed pending the resolution of this Appeal. Although the interim and final chronic WET testing requirements for Outfalls 006 and 007 do not go into effect until three years after the effective date of the Permit, EDCC will continue monthly acute biomonitoring with respect to

Outfalls 006 and 007 pursuant to the terms of the 2007 Permit during the pendency of this appeal. The chronic WET testing requirement for Outfall 104ST is not appropriate, should be eliminated, and is stayed pending the resolution of this Appeal. However, because the chronic WET testing requirement for Outfall 104ST does not go into effect for three (3) years, the automatic stay of that requirement has no impact during the pendency of this Appeal.

ISSUE NO. 5- THE METALS LIMITS FOR THE STORM WATER OUTFALLS ARE NOT APPROPRIATE.

60. The contents of paragraphs 1-3 are incorporated herein.

61. Outfalls 002, 006 and 007 are storm water influenced outfalls that only discharge following precipitation events, and for short periods of time, generally less than 24 hours. Outfall 104ST is a new outfall that purports to represent the combined flow of Outfalls 006 and 007.

62. The 2007 Permit included as Condition 13 a requirement that EDCC "perform an evaluation of the background flow of the receiving streams for the storm water outfalls (Outfalls 002, 006 and 007) and the dilution of effluent in the receiving stream as a result of a storm event." (the "Background Flow Study") EDCC completed the evaluation and presented the results to ADEQ. The Background Flow Study was approved by ADEQ with the results incorporated into a pre-draft NPDES permit modification that incorporated the results of the Background Flow Study through new, proposed, water quality based metals effluent limits at Outfalls 006 and 007. The metals effluent limits, and all associated permit conditions, imposed through Outfall 104ST do not appropriately incorporate the

results of the Background Flow Study and should be eliminated for the following reasons:

(a) The metal effluent limits for Outfall 104ST cannot be calculated until after the precipitation event has occurred, effluent and background flow measured, sample results obtained for metals in the effluent, and dilution calculations are performed. Accordingly, EDCC cannot know whether it is in or out of compliance until after a precipitation induced discharge occurs. It is inappropriate to impose a permit condition that subjects the permittee to liability for non-compliance in this manner, and it would be a violation of due process to impose a penalty under such circumstances.

63. EDCC does not appeal from the interim metals effluent limits for total recoverable lead at Outfalls 006 or 007, and those interim metals effluent limits for total recoverable lead at Outfalls 006 and 007 remain in effect during the pendency of this Appeal.

64. The Permit proposes to replace the Total Recoverable Lead Interim Limits at Outfalls 006 and 007 with Final "Report Only" limits for Outfalls 006 and 007, and to impose numerical, Final Total Recoverable Lead and Total Recoverable Zinc effluent limits for Outfall 104ST. The numerical, Final Total Recoverable Lead and Total Recoverable Zinc effluent limits for Outfall 104ST are stayed pending the resolution of this Appeal.

65. The Permit contains inconsistent dates for when this transition from "Interim Limits" to "Final Limits" is to take place, stating in one instance that the Interim Limits for metals at Outfalls 006 and 007 remain in effect for "three years" and

that the Final Limits effluent limits for Outfalls 006, 007 and 104ST begins "three years from the effective date" but stating in another instance that the transition occurs six (6) months after the effective date. Pages 11-14 of Part IA. EDCC appeals from any condition, statement or implication that the Interim Limits for Outfalls 006 and 007 expire on any date earlier than three (3) years from the effective date of the Permit. Accordingly, any conditions in the Permit that would cause the numerical Interim Limits for Total Recoverable Lead at Outfalls 006 and 007 to expire on any date earlier than three (3) years from the effective date of the Permit are stayed.

66. In the event the Commission finds that Outfall 104ST should remain in the Permit, EDCC appeals the Final numerical effluent limits for total recoverable lead and total recoverable zinc at Outfall 104ST for the following reasons.

(a) The watershed for Outfall 104ST is less than 10 square miles and as a result the aquatic life criteria do not apply during the critical season.

(b) Condition 24 of Part II of the Permit provides a methodology for obtaining and compositing samples for Outfall 104ST. It is not feasible or appropriate to obtain "instantaneous" samples to composite for Outfall 104ST, and the methodology outlined in Condition 24 is neither feasible nor appropriate for calculating and characterizing the upstream and downstream flows for Outfall 104ST, and does not match the methodology used in the ADEQ approved Background Flow Study.

(c) ADEQ based the effluent limits for Outfall 104ST on chronic aquatic life water quality criteria for total recoverable lead and total recoverable zinc. It is not

appropriate to use chronic aquatic life criteria for storm water outfalls such as Outfalls 104ST.

(d) ADEQ recognized that "reasonable potential was not demonstrated" when the appropriate procedure outlined in the Continuous Planning Process was followed; i.e. using the background flow to effluent flow. Response to Comments, Response 8. Nonetheless, ADEQ failed to follow the procedure outlined in the Continuous Planning Process to calculate the potential to exceed for zinc. Had ADEQ used the appropriate procedure, there would be no potential that total recoverable zinc in Outfall 104ST would exceed the water quality criteria, and there would be no zinc effluent limit for Outfall 104ST.

67. The total recoverable zinc effluent limit in Outfall 104ST is stayed during the pendency of this Appeal.

ISSUE NO. 6- THE USE OF CHRONIC AQUATIC LIFE CRITERIA AT OUTFALL 002 IS NOT APPROPRIATE.

68. The contents of paragraphs 1-3 are incorporated herein.

69. Outfall 002 is a storm water influenced outfall that only discharges following precipitation events, and for short periods of time, generally less than 24 hours. Since the completion of the El Dorado Pipeline, and the reconfiguration of the storm water collection system, the circumstances under which Outfall 002 might discharge have been significantly reduced, if not eliminated for all practical purposes. There has been no discharge from Outfall 002 since July 18, 2014, and that discharge occurred for less than six (6) hours.

70. ADEQ based the interim and final metal effluent limits for Outfall 002 on chronic aquatic life water quality criteria for total recoverable copper, total recoverable

lead and total recoverable zinc. It is not appropriate to use chronic aquatic life criteria to establish metal water quality effluent limits for storm water outfalls such as Outfall 002.

71. The effluent limits for total recoverable copper, total recoverable lead and total recoverable zinc at Outfall 002 should be re-calculated using acute aquatic life water quality criteria.

72. Although the interim and final total recoverable copper, total recoverable lead and total recoverable zinc at Outfall 002 are stayed pending the final resolution of this Appeal, the total recoverable copper, total recoverable lead and total recoverable zinc at Outfall 002 in the 2007 Permit are identical so there is no practical effect to the stay.

ISSUE NO. 7- THE PERMIT SHOULD INCLUDE A COMPLIANCE SCHEDULE FOR THE NEW DISSOLVED OXYGEN EFFLUENT LIMIT AT OUTFALL 003.

73. The contents of paragraphs 1-3 are incorporated herein.

74. The Permit includes new dissolved oxygen ("DO") effluent limit at Outfall 003.

75. The new DO limits apply immediately by imposing the DO limits as Interim Limits which will go into effect on November 1, 2017 if not stayed.

76. It was not appropriate to include the new dissolved oxygen DO limits as Interim Limits for Outfall 003 without a compliance schedule.

77. In order to provide the time necessary for EDCC to design, obtain and install the necessary equipment to monitor for DO at Outfall 003, and to undertake any measures that may be necessary to achieve compliance once DO monitoring data becomes available, a compliance period is necessary and it was not appropriate

for ADEQ to include the new dissolved oxygen DO limits as Interim Limits for Outfall 003 without an appropriate compliance schedule.

78. The new dissolved oxygen DO limit imposed as an Interim Limit for Outfall 003 is stayed pending the resolution of this Appeal.

ISSUE NO. 8-THE ZINC REPORTING REQUIREMENT FOR OUTFALL 003 SHOULD BE ELIMINATED.

79. The contents of paragraphs 1-3 are incorporated herein.

80. Zinc reporting requirements for Outfall 003 were added to the Permit because "the receiving stream is on the 303(d) list for [zinc]." Page 30 of Fact Sheet.

81. Zinc is not listed for the "ELCC tributary," the receiving stream for Outfall 003, in the 2016 303d list recently approved by USEPA.

82. Accordingly, the inclusion of zinc as an interim and final effluent reporting requirement for Outfall 003 is not appropriate.

83. The new zinc reporting requirement, imposed as an interim and final requirement for Outfall 003 is stayed pending the resolution of this Appeal.

ISSUE NO. 9-THE OUTFALL 010 MONITORING FREQUENCY FOR TSS, CBOD AND TP SHOULD BE REDUCED TO THREE PER WEEK.

84. The contents of paragraphs 1-3 are incorporated herein.

85. Condition No. 4 of the 2007 Permit provides that the internal monitoring requirements for Outfall 010 "will be reduced" to three times per week when 365 consecutive data points demonstrating compliance have been submitted. Page 2 of Part III.

86. EDCC submitted in excess of 365 consecutive data points that demonstrated compliance with the Outfall 010 effluent limits for total suspended solids

("TSS"), carbonaceous biological oxygen demand ("CBOD") and total phosphorus ("TP"). Although there have been extremely infrequent violations of the TSS and CBOD limits (one TSS exceedance on August 9, 2016 and one CBOD exceedance on September 10, 2016) those two exceedances do not override the fact that EDCC demonstrated 365 consecutive days of compliance as specified in the 2007 Permit to qualify for a reduction in frequency.

87. Under the circumstances of EDCC's exemplary performance, reducing the monitoring frequency for TSS and CBOD to three times per week is appropriate.

88. ADEQ refused to remove the TP monitoring requirement for Outfall 010 based on TP effluent data reported under NPDES Permit No. AR0050296. This is not an appropriate rationale for denying the request to remove the TP monitoring requirement for Outfall 010 in this Permit. EDCC demonstrated 365 consecutive days of compliance as specified in the 2007 Permit to qualify for a reduction in frequency, and three times per week monitoring for TP is adequate to address any concerns ADEQ might have with respect to compliance with the TP permit limit for NPDES Permit No. AR0050296.

89. Accordingly, the monitoring requirements for the Outfall 010 effluent limits for total suspended solids ("TSS"), carbonaceous biological oxygen demand ("CBOD") and total phosphorus ("TP") should be reduced to three times per week.

ISSUE NO. 10-THE FLOW MONITORING REQUIREMENT FOR THE STORM WATER OUTFALLS SHOULD BE CHANGED FROM "INSTANTANEOUS" TO "TOTALIZER".

90. The interim and final effluent limits for Outfalls 006 and 007 imposed a new flow measuring requirement that requires the flow be measured once per day when a discharge is present by the sample type: "Instantaneous." The 2007 Permit required the flow to be measured by the sample type: "Estimate."

91. Under the 2007 Permit, EDCC obtained flow measurements throughout the duration of a precipitation event when flow was present and estimated the total volume of the flow. By changing the measurement requirement from "estimate" to "instantaneous" the reported flow from a daily instantaneous reading will represent the flow at one point in time, and will not be representative of the flow volume over the duration of the precipitation event.

92. The sample frequency and type should be changed to "totalizer" which will more accurately reflect the flow volume over the duration of the precipitation event, and a reasonable compliance period should be included in the Permit to provide time to install and calibrate a totalizer.

93. The new flow sample type, "instantaneous," imposed as an interim and final requirement for Outfalls 006 and 007 is stayed pending the resolution of this Appeal, and the sample type from the 2007 Permit, "estimate" remains in effect during the pendency of this Appeal.

WHEREFORE, EDCC requests an adjudicatory hearing and the opportunity to present evidence and oral argument before the Arkansas Pollution Control & Ecology Commission; that the automatic stay remain in place as more particularly described above, that the Commission

find that ADEQ's final permitting decision regarding the effluent limits and permit conditions enumerated in this request are arbitrary, capricious, not in accordance with state and federal law, and not supported by generally accepted scientific and engineering knowledge and practices; and for such other relief to which it may be entitled.

Respectfully submitted,

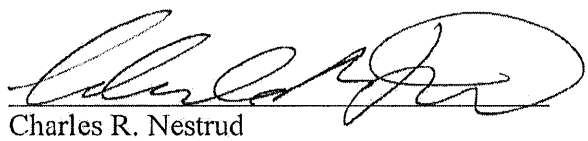
BARBER LAW FIRM, PLLC.
425 W. Capitol Ave., Suite 3400
Little Rock, Arkansas 72201
(501) 372-6175

By: _____
Charles R. Nestrud, ABA No. 77095

CERTIFICATE OF SERVICE

I, Charles R. Nestrud, do hereby certify that I have served a copy of the foregoing pleading upon the following attorneys of record by U.S. Mail, postage prepaid, this 27 day of September, 2017.

Becky Keogh, Director
via
Michael McAlister
Attorney Supervisor
ARKANSAS DEPARTMENT OF
ENVIRONMENTAL QUALITY
5301 Northshore Drive
North Little Rock, AR 722118-5317



Charles R. Nestrud