## BEFORE THE ARKANSAS COMMISSION ON POLLUTION CONTROL & ECOLOGY

IN RE: REQUEST BY EL DORADO	)
CHEMICAL COMPANY TO	)
INITIATE RULEMAKING TO AMEND	) DOCKET NO.
REGULATION NO. 2	)

## PETITION TO INITIATE THIRD-PARTY RULEMAKING TO AMEND REGULATION NO. 2

Petitioner, El Dorado Chemical Company (EDCC), for its Petition to Initiate Third-Party Rulemaking to Amend Regulation No. 2 ("Petition") states:

- 1. This Petition is submitted pursuant to Section 2.306 of Arkansas Pollution Control and Ecology Commission (APCEC) Regulation No. 2, Section 3.4 of APCEC Regulation No. 8 and the Continuing Planning Process. As set forth more fully below in paragraph 7, EDCC is requesting modifications to the chloride, sulfate and total dissolved minerals (TDS) criteria of the Arkansas Water Quality Standards (WQS) and removal of the designated, but not existing, domestic water supply use for (a) an unnamed tributary to Flat Creek to the mouth of Salt Creek ("UTA"); (b) an unnamed tributary to Flat Creek from EDCC Outfall 001 discharge to the confluence with unnamed tributary of Flat Creek ("UTB"); (c) certain sections of Flat Creek; and (d) certain sections of Haynes Creek.
- 2. EDCC operates a fertilizer and acid manufacturing, storage, and distribution facility on the north side of El Dorado, Union County, Arkansas. EDCC has operated the facility since 1983.
- 3. Storm water runoff and treated process wastewater are discharged from Outfall 001 as authorized by the Arkansas Department of Environmental Quality (ADEQ) under

National Pollutant Discharge Elimination System (NPDES) Permit No. AR0000752 that was effective on July 1, 2002. Outfall 001 discharges to the UTB. EDCC currently has additional NPDES permitted outfalls that are not considered significant sources of minerals to the receiving streams due to discharge locations, small or limited flows, or chemical characteristics. However, the potential for mineral concentrations to exceed the ecoregion instream WQS in UTB, UTA, Flat Creek, and Haynes Creek is possible during normal discharge operations through Outfall 001. Current plans for continued facility upgrades and improvements include routing all site storm water into catchment basins that will ultimately be routed through Outfall 001 discharge. The plan is that all flows from the facility will ultimately be routed and discharged through Outfall 001.

- 4. Outfall 001 is addressed specifically in EDCC's Spill Prevention Control and Countermeasures plan (SPCC) and its Storm Water Pollution Prevention Plan (SWPPP). Best Management Practices (BMPs) at Outfall 001 have been implemented to reduce contamination of storm water and prevent spill release. The storm water and process water are directed through a neutralization treatment system, aeration basin, and an equalization basin. Within the last two years, EDCC has implemented production modifications, process optimization and environmental control projects, which have resulted in demonstrated reductions in SO<sub>4</sub> and TDS discharged through Outfall 001.
- 5. The effluent limitations for chloride, sulfate and TDS in EDCC's NPDES Permit are based upon the maintenance of the designated, but not existing, domestic water supply use for the UTA, UTB, Flat Creek, and Haynes Creek. The applicable Arkansas WQS for all four is:

Chloride 14 mg/l

Sulfate 31 mg/L TDS 123 mg/L

6. Pursuant to APCEC Regulation No. 2, the watercourses at issue herein are assigned the following designated uses:

Unnamed Tributary to Flat Creek from confluence of UTB to the confluence with Flat Creek (UTA)

Primary Contact Recreation Secondary Contact Recreation

Seasonal and Perennial Gulf Coastal Fishery

Domestic, industrial and agricultural water supply

Unnamed Tributary to Flat Creek from EDCC Outfall 001 discharge to the confluence with unnamed tributary of Flat Creek (UTB)

Secondary Contact Recreation Seasonal Gulf Coastal Fishery Domestic, industrial and agricultural water supply

Flat Creek from mouth of UTA tributary to the mouth of Haynes Creek

Primary Contact Recreation Secondary Contact Recreation Perennial Gulf Coastal Fishery

Domestic, industrial and agricultural water supply

Haynes Creek from confluence of Flat and Salt Creeks downstream to confluence with Smackover Creek

Primary Contact Recreation
Secondary Contact Recreation
Perennial Gulf Coastal Fishery
Domestic, industrial and agricultural water supply

These designated uses are existing uses with the exception of the domestic water supply use.

- 7. Through this Petition, EDCC is requesting the following amendments to APCEC Regulation No. 2:
  - a. modify the dissolved minerals criteria for the UTA as follows:

TDS from 123 mg/L to 315 mg/L Sulfate from 31 mg/L to 80 mg/L

## Chloride from 14 mg/L to 16 mg/L

b. modify the dissolved minerals criteria for the UTB as follows:

TDS from 123 mg/L to 475 mg/L Sulfate from 31 mg/L to 125 mg/L Chloride from 14 mg/L to 23 mg/L

c. modify the dissolved minerals criteria for Flat Creek from mouth of UTA tributary to the mouth of Haynes Creek as follows:

TDS from 123 mg/L to 560 mg/L Sulfate from 31 mg/L to 67 mg/L Chloride from 14 mg/L to 165 mg/L

d. modify the dissolved minerals criteria for Haynes Creek from confluence of Flat and Salt Creeks downstream to confluence with Smackover Creek as follows:

TDS from 123 mg/L to 855 mg/L Sulfate from 31 mg/L to 55 mg/L Chloride from 14 mg/L to 360 mg/L

- e. remove the Domestic Water Supply use designation for the UTA.
- f. remove the Domestic Water Supply use designation for the UTB.
- g. remove the Domestic Water Supply use designation for Flat Creek from mouth of UTA tributary to the mouth of Haynes Creek.
- h. remove the Domestic Water Supply use designation for Haynes Creek from confluence of Flat and Salt Creeks downstream to confluence with Smackover Creek.
- 8. A black-lined version of the specific changes which are requested to Regulation No. 2 is attached hereto as "A" and is incorporated herein.
- 9. On July 11, 2006, EDCC submitted to ADEQ a document entitled Section 2.306 Site Specific Water Quality Study for Cl, SO<sub>4</sub> and TDS in support of this Petition (hereinafter "the Study"). The Study is filed contemporaneously herewith as Exhibit "E." This document

fully satisfies the information requirements of Section 2.306 of Regulation No. 2 for Site Specific Criteria for amending Regulation No. 2.

- 10. This Petition is supported by the following facts:
  - The domestic water supply use designation for the UTB, UTA, and above
    described portions of Flat Creek and Haynes Creek were assigned by default, are
    not existing uses, and are not attainable uses because the natural, ephemeral and
    low flow conditions prevent the attainment of the use;
  - The aquatic life field studies conducted in April 2005 and 2006 show that despite the fact that the watercourses are seasonal wet weather tributaries with small watersheds which limit the development of biotic communities, the designated aquatic life use and the biological integrity of the watercourses are being maintained downstream of the discharges;
  - Recent toxicity testing in 100% whole effluent from Outfall 001 effluent demonstrates no adverse effect on the aquatic life communities of the affected watercourses;
  - Current discharge concentrations have been substantially reduced from historic concentrations through extensive facility upgrades to Best Management Practices and spill control containment;
  - There is no current economically feasible treatment technology for the removal of chloride, sulfate, or TDS. Ion exchange and reverse osmosis treatment technologies do exist; however, these methods are not cost effective on a large scale basis, are prohibitively expensive, and generate a concentrated brine which

is environmentally difficult to dispose of. Such treatment technology is not required to meet the existing uses and would not add any significant environmental protection.

- 11. The Questionnaire for Filing Proposed Rules and Regulations with the Arkansas Legislative Council and Joint Interim Committee is attached hereto as Exhibit "B" and is incorporated herein.
- 12. The Financial Impact Statement is attached hereto as Exhibit "C" and is incorporated herein.
- 13. The Economic Impact/Environmental Benefit Analysis is attached hereto as Exhibit "D" and is incorporated herein.
- 14. EDCC has reviewed Executive Order 05-04 and has determined that the request herein does not affect small business for the following reasons: (a) there are no commercial operations located on or adjacent to the affected watercourses which use the waters; (b) this rulemaking will not increase the loadings of the affected watercourses but rather will set the WQS at a level reflective of historic loadings adjusted by the measures implemented by EDCC to reduce the historic concentrations and, therefore, there will be no impact to any agricultural or business usage of the affected watercourses; and (c) the aquatic life studies of the affected stream segments demonstrate maintenance of designated fishery use. Therefore no economic impact analysis by the Arkansas Department of Economic Development is required.
- 15. Documentation supporting the changes requested by paragraph 7, above, has been reviewed by the Arkansas Natural Resources Commission and the Arkansas Department of Health and Human Services. The Arkansas Natural Resources Commission has provided

documentation that the requested changes do not conflict with the Arkansas Water Plan. The

Arkansas Department of Health and Human Services has provided documentation that none of

the described watercourses herein, the UTA, UTB, Flat Creek from the mouth of UTA tributary

to the mouth of Haynes Creek, or Haynes Creek from confluence of Flat and Salt Creeks

downstream to confluence with Smackover Creek, has been approved as, or is being considered

as, domestic water sources. Copies of these agencies' documentation are attached hereto as

Exhibit "F" and incorporated herein.

16. The Minute Order to initiate rulemaking is attached hereto as Exhibit "G" and is

incorporated herein.

WHEREFORE, El Dorado Chemical Corporation, requests that the Commission initiate a

rulemaking to amend Regulation No. 2 in the manner requested in Paragraph 7, above.

Respectfully submitted

CHISENHALL, NESTRUD & JULIAN, P.A.

400 West Capitol, Suite 2840

Little Rock, AR 72201

Telephone: 501-372-5800

Facsimile: 501-372-4941

By:

Charles R. Nestrud, AR Bar 77095

Ann P. Faitz, AR Bar 86058

## **CERTIFICATE OF SERVICE**

I, Ann P. Faitz, state that I have, on this 3 day of September, 2006, hand-delivered a copy of the foregoing Petition to Initiate Third-Party Rulemaking to Amend Regulation No. 2 to Ms. Ellen Carpenter, Arkansas Department of Environmental Quality, 8001 National Drive, Little Rock, AR 72219.

Ann P. Faitz