

Attachment B to
Exhibit B

Executive
Summary

EXECUTIVE SUMMARY

El Dorado Chemical Company (EDCC) is requesting a modification of the Arkansas Water Quality Standards (WQS) set forth in Regulation No. 2 of the Arkansas Pollution Control and Ecology Commission. EDCC requests modification of the chloride, sulfate and total dissolved minerals (TDS) criteria and removal of the designated, but not existing, domestic drinking water supply use for (a) an unnamed tributary to Flat Creek from confluence of UTB to the confluence with Flat 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) for Flat Creek from the mouth of the UTA tributary to the mouth of Haynes Creek; and (d) for Haynes Creek from the confluence of Flat and Salt Creeks downstream to confluence with Smackover Creek. The specific amendments to Regulation No. 2 requested by EDCC are set forth more fully below.

EDCC operates a fertilizer and acid manufacturing, storage, and distribution facility on the north side of El Dorado, Union County, Arkansas. The facility discharges storm water and processed wastewater through Outfall 001 as authorized by the Arkansas Department of Environmental Quality (ADEQ) under National Pollution Discharge Elimination System (NPDES) Permit No. AR0000752.

The effluent from Outfall 001 discharges into unnamed wet weather tributaries. The discharge limits contained in the NPDES Permit are based on ecoregion numbers and the maintenance of a domestic drinking water supply use. The domestic drinking water supply uses for the affected watercourses are designated, but 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 of 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 is being maintained downstream of the discharges. Further recent whole effluent toxicity testing demonstrates that there is toxicity as a result of the dissolved mineral concentrations.

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, EDCC is requesting the following modifications to 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.

This request is supported by the following:

- The domestic water supply use designation for the UTA, UTB, 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.