

State of Louisiana



Department of Environmental Quality

KATHLEEN BABINEAUX BLANCO **GOVERNOR**

MIKE D. McDANIEL, Ph.D.

June 16, 2005

Martin Maner, Chief Water Division Arkansas Department of Environmental Quality P.O. Box 8913 Little Rock, AR 72219

RE: El Dorado Pipeline Model

Dear Mr. Maner:

That a cop! to Jince Blubes!

Am-1 one to Jince Blubes!

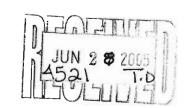
Also one to Jince Blubes!

Orid to make the Market

The Louisiana Department of Environmental Quality (LDEQ) has been following the issue of the proposed El Dorado Pipeline Complex since it first came to our attention in December. The mayor of the City of West Monroe contacted LDEQ in mid-December expressing his concern about the potential impact of the proposed combined discharge on the water quality of the Louisiana reach of the Ouachita River. At that time, Dugan Sabins of my staff contacted you to gain further information. LDEQ is also concerned about the potential impact of the combined discharge to the Ouachita River in Louisiana.

The Region 6 office of EPA forwarded a copy of the modeling results for the proposed El Dorado Pipeline Complex prepared by GBMc and Associates. LDEQ staff reviewed the modeling results and prepared some comments on the model. The purpose of this letter is to share those comments with you and to express LDEQ's concern about the possible impact of the proposed discharge. In summary, LDEQ believes that more extensive modeling should be done to include nutrient cycle modeling and to examine the effect on the water quality of the Ouachita River down to the state line. The existing model did not examine nutrients and only examined the reach of the Ouachita River upstream of the Felsenthal Reservoir. An earlier model of the Ouachita River for the Georgia Pacific Mill discharge at Crossett showed little reserve assimilative capacity in the Louisiana reach of the river. Thus, LDEQ is concerned about the proposed pipeline discharge.

More detailed comments are enclosed for your consideration. LDEO appreciates your consideration of our concerns, and we are happy to offer technical assistance to Arkansas DEQ in further modeling of the Ouachita River.



Mr. Martin Maner June 16, 2005 Page 2

If you wish to discuss this in more detail, please contact Mrs. Barbara Romanowsky of my staff at 225-219-3557.

Sincerely,

Mike D. McDaniel, Ph.D.

Mike S. M. Sand

Secretary

esc

Enclosure

c: Mary Leath, Deputy Director, ADEQ Mo Shafii, Permits Manager, ADEQ Barbara Romanowsky, LDEQ Dick Duerr, LDEQ

PD7

Review of an Arkansas DEQ Model of the Ouachita River for Proposed Discharges at El Dorado, Arkansas

April 29, 2005

The model was run by GBM^C & Associates of Bryant, Arkansas for the Arkansas Department of Environmental Quality. The El Dorado dischargers would be five existing facilities, the effluent from which would be transported to the Ouachita River at about river mile 280:

City of El Dorado North POTW City of El Dorado South POTW El Dorado Chemical Company Lion Oil Company Great Lakes Chemical Company

The model used is MULTI-SMP, and it covers a reach of the Ouachita River from river mile 280 to river mile 255. Parameters modeled are dissolved oxygen, five day biochemical demand, and ammonia-nitrogen. Ammonia-nitrogen is modeled as oxygen demand but not as a nutrient.

1. Louisiana cannot use the output from this model to calculate the impact of the five discharges listed above on the Ouachita River in Louisiana.

There are existing QUAL2EU models of the river from the Felsenthal Dam in Arkansas at river mile 227 to the Columbia Dam in Louisiana at river mile 117. These models simulate nutrients and *chlorophyll a* as well as oxygen demand. The MULTI-SMP model is not calibrated to water quality data, does not simulate the river to the Felsenthal Dam, and does not provide the necessary information needed to feed headwater data to the downstream models. We are more concerned with the additional nutrient load to the river than with oxygen demanding substances. We would expect the oxygen demand of the El Dorado discharges to be reduced to background in the waters above the Felsenthal Dam.

2. We do not believe that MULTI-SMP is an appropriate model for the characterization of the impact of major dischargers on the Ouachita River, especially those discharging large quantities of nutrient.

Being concerned with the impact of additional nutrient load on the Ouachita River in Louisiana, we would like to be able to evaluate that impact through the use of the existing models. The MULTI-SMP model does not simulate the necessary parameters. We request that the reach of the Ouachita River between El Dorado and Felsenthal be modeled using an appropriate and <u>fully calibrated</u> model, that is, a model capable of simulating the impact of nutrient as well as oxygen demand.

