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August 30, 2005

Mr. Martin Maner  
Chief, Water Division  
Arkansas Department of Environmental Quality  
8001 National Drive  
PO Box 8913  
Little Rock, AR 72219-8913

Re: Ouachita River Pipeline Permitting Issues  
GBM<sup>®</sup> No. 3007-03-200

Dear Mr. Maner:

We greatly appreciate the time you and Mr. Shafii spent with us to discuss the NPDES permit requirements for the Ouachita River. As requested, this letter is a follow-up to that meeting and presents the major points of discussion. Those major issues are:

**Concentration Limits at the Ouachita River Outfall**

Since the design flow for the pipeline (20 mgd) is larger than current average combined flows (by approximately 49%), we feel it is appropriate to have mass limits for CBOD and ammonia with a 20 mgd monthly average flow cap. This combination of mass limits and a flow cap requires the effluent to meet concentrations which maintain the water quality standards while providing the flexibility needed for growth and to address the variation in flows that will occur over time. In our opinion, such a combination is at least as protective of the water quality standards as concentration limitations.

As discussed at the meeting, our review of 40CFR 122.45(f) does not **require** the development of concentration limits. We acknowledge that it does allow the derivation of concentration limits, but that is clearly an option rather than a requirement. As you are aware, the application of derived concentration limits has been used in those situations where there is a very low receiving stream flow in relation to effluent volumes. That is certainly not the case in this discharge situation.

**TSS Limitations**

As you are aware, there are no Water Quality Standards for TSS and the placement of limitations for that parameter at the Ouachita River outfall is inappropriate. All appropriate technology based limits for TSS should be placed on the individual outfalls to the pipeline per current permit requirements. As discussed at the meeting, in our opinion the City's individual outfalls should continue to have 90 mg/L and 135 mg/L monthly average and daily maximum limits (which are the same as those in their current Ouachita River permit). Based on our understanding of the equivalent to secondary regulations, the fact that they are discharging to a common pipeline does not disqualify them from coverage. We are unaware of any regulation

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which would exclude them from receiving the 90/135 mg/L limits due to participating in a shared pipeline.

### **Reallocation of Ammonia Daily Maximum Mass Limitations**

The proposed permits allocate both the monthly average and daily maximum for ammonia. The monthly average mass loadings are based on the Water Quality Management Plan values with the daily maximum limits derived using the standard 1.5 multiplier. This is appropriate for the Joint Pipeline permit, which results in a daily maximum ammonia limit of 1,993.3 lbs (May-October) and 4,844.2 lbs (November-April). However, the allocation ADEQ proposed would allocate EDCC a daily maximum value which is 413.5 pounds less than the applicable technology limits.

The parties have reviewed their individual situations, and the City and EDCC have agreed to reallocate the daily maximum ammonia mass limits between them. The City's daily maximum ammonia mass limit will be reduced by 207 pounds (86 pounds per day reduction at the North Plant and 121 pounds per day reduction at the South Plant), and EDCC's daily maximum ammonia mass limit will be increased by 207 pounds. This will not change the quantity of ammonia discharged, it will merely reallocate those quantities while not exceeding the Ouachita River outfall maximum daily ammonia limits. Under this reallocation EDCC's allocated daily maximum share of ammonia would be 604.5 pounds per day (year round). The City's allocated share of ammonia for the North Plant will be 449.5 pounds per day (May-October) and 1,648 pounds per day (November-April), and for the South Plant will be 618 pounds per day (May-October) and 2,273 pounds per day (November-April).

### **Phosphorus Limit**

As discussed at the meeting, the ADEQ is continuing placement of a .5 mg/L phosphorus limit for the Ouachita River outfall pending the completion of the nutrient study which is currently underway. It is our position that placement of such a restrictive limitation is not appropriate for the following reasons:

1. It is not based on any scientific data, but appears to be a best professional judgment value derived from limited phosphorus data from the City's discharges. It should be noted that the City's data has been collected during the summer months since this issue arose and winter phosphorus concentrations have not been documented. We do not know if that value can be met during the winter time without additional treatment.
2. It reflects a limit which is twice as stringent as that negotiated with Oklahoma for municipalities in northwest Arkansas which discharge larger volumes of wastewater into much smaller receiving streams than the Ouachita River. Arkansas has consistently opposed the actions of Oklahoma to impose its phosphorus criteria in the state and the imposition of a limit twice as stringent as that agreed to by Oklahoma does not seem consistent with that approach.

Mr. Martin Maner  
August 30, 2005  
Page 3 of 4

- 3. It is not being applied to all the municipalities in the Ouachita River and Saline River basins, which places El Dorado in a position of being less competitive with neighboring communities when it comes to economic growth through the attraction of new industries.
- 4. Although it is possible that the limit would be removed or increased upon completion and approval of the nutrient study that has rarely been the usual process for NPDES permit limitations. The ADEQ has consistently applied the "anti-backsliding" policy to require the continuation of limits in NPDES permits, even when they are shown to be inappropriate.

In lieu of a numerical permit limit, we would request the placement of an interim monitoring and reporting requirement for phosphorus at Ouachita River outfall and at each individual facility. If the nutrient study shows that no numerical phosphorus limit is needed, and the permit is not reopened to include a final permit limit, the monitoring and report requirement would remain in effect for the duration of the permit. If the nutrient study shows that a numerical phosphorus limit is needed, and the permit reopened to include a numerical limit, the interim limit will expire in three (3) years from the effective date of the permit, and the new limit set through the reopener would go into effect at the end of that three (3) year period.

**Biomonitoring**

The proposed permits require each of the four entities to run biomonitoring tests at the same time as the test is run for the combined wastewater at the Ouachita River outfall. This is apparently an effort to assist in determining which facility might be causing toxicity, if biomonitoring toxicity is found. While accountability is an important goal of this permitting exercise, this proposal would add approximately \$80,000 in annual testing costs, and would not provide any defensible data to determine responsibility. The pipeline participants, who are jointly responsible for addressing toxicity, want accountability but are not interested in costly, unscientific data. There is no feasible way to determine the appropriate critical dilutions for each of the individual outfalls because the proportions in the final effluent at the Ouachita River outfall will change daily throughout the 7 days of the biomonitoring test. Concurrent biomonitoring simply will not provide adequate information but will be extremely costly.

We propose that biomonitoring be conducted only on the joint pipeline effluent with concurrent effluent samples taken from each participant at the same time as the sample is taken for biomonitoring with lab analyses of those samples for permit compliance. Additionally, for any biomonitoring sample that fails for lethality, the effluent sample taken at the individual participants will be analyzed for a suite of indicator parameters unique to that facility. This list will be developed taking into account holding times required for sample analyses. This will identify any unusual pollutants that were present in any sample that failed biomonitoring. While this approach will potentially add to the analytical costs, it will provide much better data for accountability. Additionally, the discharge from each facility will be monitored for pH and conductivity to provide real time operational data to indicate the presence of potential upset conditions.

In our opinion, this analytical approach will provide a much greater chance of determining the cause of Ouachita River outfall biomonitoring problems, should they occur.

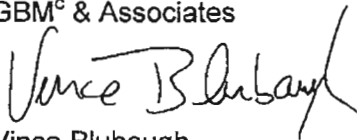
## Sampling Frequencies

We agree with the daily monitoring requirements for the Ouachita River outfall as it is important to demonstrate compliance at all times. However, mirroring those daily monitoring requirements at the individual outfalls is not warranted due the extremely high annual cost (approximately \$300,000 in lab costs alone), the retention times of the City's and EDCC's wastewater treatment systems and the historical consistency of effluent from Lion Oil and Great Lakes.

Our suggestion is to retain the increased monitoring (once/day) at the Ouachita River outfall and reduce the monitoring frequency for those same parameters for each individual facility to three times per week, which is the frequency that the facilities would be monitoring if there were no joint pipeline. These reduced frequencies would be interim monitoring frequencies, applicable during the time that the pipeline is under construction (approximately 2 years). Before the initiation of pipeline use, the effluent data would be reviewed to determine the consistency on a weekly basis, and if the data confirms that there is little variability in data, the interim monitoring frequencies would remain in effect. If there is statistically significant variability in data such that more frequent monitoring is indicated, the monitoring frequency for the variable data would revert to the same frequency as the joint permit on a facility specific basis.

We greatly appreciate the opportunity to present our views on these issues. Please do not hesitate to contact me or Chuck Campbell with any questions or concerns at (501) 847-7077.

Sincerely,  
GBM<sup>c</sup> & Associates



Vince Blubaugh  
Principal

cc: Marcus Devine, Director, ADEQ  
Mary Leath, Chief Deputy Director, ADEQ  
Mo Shafii, NPDES Permits Section Chief, Water Division, ADEQ  
El Dorado Pipeline Group Members