

EXHIBIT E

ECONOMIC IMPACT/ ENVIRONMENTAL BENEFIT ANALYSIS

**ARKANSAS POLLUTION CONTROL & ECOLOGY COMMISSION
ECONOMIC IMPACT/ENVIRONMENTAL BENEFIT ANALYSIS**

Rule Number & Title: APCEC Regulation No. 2; Regulation Establishing Water Quality Standards for Surface Water of the State of Arkansas

Petitioner: City of Fayetteville Paul R. Noland Wastewater Treatment Plant

Contact/Phone/Electronic mail: Marcella Taylor, (501) 688-8851, mtaylor@mwlaw.com

Analysis Prepared by: Marcella Taylor, counsel for Fayetteville

Date Analysis Prepared: October 1, 2013

2A. ECONOMIC IMPACT

1. Who will be affected economically by this proposed rule? State: a) the specific public and/or private entities affected by this rulemaking, indicating for each category if it is a positive or negative economic effect; and b) provide the estimated number of entities affected by this proposed rule.

Only the City of Fayetteville is affected by this proposed rule. The effect on the City is positive.

Sources and Assumptions: *White River Use Attainability Analysis –Fayetteville, Arkansas 2013* attached as Exhibit F to City of Fayetteville’s Petition to Initiate Third-Party Rulemaking.

2. What are the economic effects of the proposed rule? State: The estimated increased or decreased cost for an average facility to implement the proposed rule; and 2) the estimated total cost to implement the rule.

There are no economic effects of the proposed rule. Adoption of proposed rule will allow Fayetteville to continue to operate the Paul R. Noland Waste Water Treatment Plant in compliance with its NPDES Permit through the site-specific modification of the dissolved mineral standards for the affected segment of the White River to levels that reflect current and historic water quality conditions, are appropriate for the operation of the Plant and are protective of the existing and designated uses.

3. List any fee changes imposed by this proposal and justification for each.

None

4. What is the probable cost to ADEQ in manpower and associated resources to implement and enforce this proposed change, and what is the source of revenue supporting this proposed rule.

None

5. Is there a known beneficial or adverse impact to any other relevant state agency to implement or enforce this proposed rule? Is there any other relevant state agency's rule that could adequately address this issue, or is this proposed rulemaking in conflict with or have any nexus to any other relevant state agency's rule? Identify the state agency and/or rule.

There is no known impact to another state agency nor is there another state agency's rule that could address the proposed change to APCEC Regulation No. 2. This rulemaking is not in conflict with, nor does it have a nexus to, any other relevant state agency's rule.

6. Are there any less costly, non-regulatory, or less intrusive methods that would achieve the same purpose of this proposed rule?

No

2B. ENVIRONMENTAL BENEFIT

1. What issues affecting the environment are addressed by this proposal?

There are currently no known technically and economically feasible treatments capable of reducing the chloride, sulfate and total dissolved solids concentration to levels that meet the current water quality criteria. This rule will allow Fayetteville to continue its operations while preserving the aquatic life, domestic water supply, agricultural water supply, industrial water supply, and primary and secondary recreational contact designated uses of White River.

2. How does this proposed rule protect, enhance, or restore the natural environment for the well being of all Arkansas?

The Use Attainability Analysis supporting Fayetteville's requested site-specific modifications established that the requested changes will be protective of, and have no adverse effect on, the aquatic life communities in the affected streams. Toxicity testing on Ceriodaphnia dubia and Pimphales promelas using the Noland WWPT's effluent showed no lethal or sub-lethal toxicity in either test organism.

Sources and Assumptions: *White River Use Attainability Analysis –Fayetteville, Arkansas 2013* attached as Exhibit F to City of Fayetteville's Petition to Initiate Third-Party Rulemaking.

3. What detrimental effect will there be to the environment or to the public health and safety if this proposed rule is not implemented?

All other available treatment technologies for the removal of minerals are either infeasible due to land restraints, climate, regulatory uncertainty with the Arkansas water quality regulations, or generates a concentrated brine which is environmentally difficult to dispose of, is unnecessary to meet the designated uses and provides no significantly increased environmental protection, and would involve an initial investment for the City and its ratepayers in excess \$188 million.

Sources and Assumptions: *White River Use Attainability Analysis –Fayetteville, Arkansas 2013* attached as Exhibit F to City of Fayetteville’s Petition to Initiate Third-Party Rulemaking.

4. What risks are addressed by the proposal and to what extent are the risks anticipated to be reduced?

The risks addressed by this proposal are the economic risk to the City of Fayetteville and its ratepayers should the dissolved mineral criteria not be modified, and the continued protection of the Ozark Highland fishery, domestic, agricultural and industrial water supply, and primary/secondary contact recreational use designation of the affected stream segments. Under this proposal the risks are substantially eliminated.