### **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 Water and Light Plant of the City of Jonesboro

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**Analysis Prepared by:** Marcella Taylor, counsel for City Water and Light Plant of the

City of Jonesboro

**Date Analysis Prepared:** April 1, 2010

#### 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 City Water and Light Plant of the City of Jonesboro (CWL) is affected by this proposed rule. The effect on CWL is positive.

Sources and Assumptions: *Use Attainability Analysis Report –Bayou DeView, Big Creek – Craighead County, Arkansas* (2009) attached to CWL's Petition to Initiate Third-Party Rulemaking as Exhibit F.

2. What are the economic effects of the proposed rule? State: 1) 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 CWL to continue compliance with its NPDES Permit while protecting the attainment of the aquatic life designated uses in the Unnamed Tributary to Big Creek, Big Creek and Bayou DeView.

Sources and Assumptions: *Use Attainability Analysis Report –Bayou DeView, Big Creek – Craighead County, Arkansas* (2009) attached to CWL's Petition to Initiate Third-Party Rulemaking as Exhibit F.

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 any other 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?

This proposed rule will allow CWL to continue to serve the public, be in compliance with its NPDES permit and continue to protect the aquatic life designated uses of the affected streams. The only available treatment technology for removal of dissolved minerals, reverse osmosis, is prohibitively expensive (\$6,500,000 for initial installation with annual operating costs of approximately \$4,400,000), generates a concentrated brine which is environmentally difficult to dispose of, and provides no significant environmental protection.

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 CWL's requested 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 Ceridaphnia dubia and Pimphales promelas using CWL effluent showed no significant lethal or sub-lethal toxicity in either test organism.

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

The only available treatment technology for the removal of minerals (reverse osmosis) generates a concentrated brine which is environmentally difficult to dispose of and provides no significant environmental protection.

Sources and Assumptions: *Use Attainability Analysis Report –Bayou DeView, Big Creek – Craighead County, Arkansas* (2009) attached to CWL's Petition to Initiate Third-Party Rulemaking as Exhibit F.

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

The risk addressed by this proposal is the continued protection of the designated and existing uses of the affected stream segments. Under this proposal the risks should be substantially eliminated.