

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: Alcoa Inc. (Alcoa)

Contact/Phone/Electronic mail: Marcella Taylor, 501.688-8851, mtaylor@mwlaw.com

Analysis Prepared by: Marcella Taylor, counsel for Alcoa

Date Analysis Prepared: September 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 Alcoa is affected by this proposed rule. The effect on Alcoa is positive.

Sources and Assumptions: *Alcoa Inc. –Bauxite Environmental Improvement Project Notice of Intent, 2009*, attached to Alcoa’s Petition to Initiate Third-Party Rulemaking as Exhibit F.

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 Alcoa to continue to manage the property while it seek a technically and economically feasible biological or chemical treatment and/or source reduction strategy capable of reducing the selenium concentration to levels that meet the chronic water quality standard.

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 biological or chemical treatment nor source reduction strategies capable of reducing the selenium concentration to levels that meet the current chronic water quality standard. This rule will allow Alcoa to continue its quest to find and/or develop treatment while preserving the fishery of Holly Creek and protecting the Saline River .

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

This proposed rule will allow Alcoa to continue to manage the property through collecting, treating and discharging surface water and wastewater (on average 2.5 billion gallons per year) while carrying out the environmental improvement project authorized by Ark. Code Ann. § 8-5-901 et seq. and by APCEC Regulation No. 2, § 2.105 and Appendix B and required by Alcoa's NPDES Permit.

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

Without this proposed rule Alcoa may not have any alternative other than moving the discharge to the Saline River via a constructed pipeline. Implementation of this proposed rule is necessary and appropriate to preserve the habitat-limited fishery of Holly Creek and protect the Saline River.

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 loss of the continued protection of the habitat-limited fishery of Holly Creek and protection of the designated and existing uses of the Saline River. Under this proposal the risks should be substantially eliminated.