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

**Rule Number & Title:** APCEC Regulation NO. 2; Regulation Establishing Water

Quality Standards for Surface Waters of the State of

Arkansas

**Petitioner:** UMETCO Minerals Corporation

Contact/Phone/Electronic Mail: William A. Eckert, 501-379-1710, aeckert@ggtb.com

**Analysis Prepared by:** William A. Eckert, counsel for UMETCO Minerals

Corporation

**Date Analysis Prepared:** June 10, 2010

## 2A. ECONOMIC IMPACT

1. Who will be affected economically by this proposed rule? State: a) the specified 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.

UMETCO Minerals Corporation is affected by this proposed rule. The effect of the rule on UMETCO is positive. No other entities will be economically affected by this rule.

Sources and Assumptions: "Wilson Creek Minerals Water Quality Standards Evaluation" and "Addendum to the December 2004 Wilson Creek Minerals Water Quality Standards Evaluation" attached to UMETCO'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 net economic effects of the proposed rule from current conditions because the rule simply adjusts dissolved mineral criteria to reflect current conditions. Adoption of proposed rule will allow UMETCO to remain in compliance with its NPDES Permit while protecting the aquatic life of Wilson Creek.

Sources and Assumptions: "Wilson Creek Minerals Water Quality Standards Evaluation" and "Addendum to the December 2004 Wilson Creek Minerals Water Quality Standards Evaluation" attached to UMETCO'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, not applicable.

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 any other 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 proposal, if accepted, will not adversely affect the environment because it allows current conditions to be maintained. This proposed rule will allow UMETCO 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 (\$8,400,000 for initial installation with annual operating costs of approximately \$2,700,000), generates a concentrated brine which is environmentally difficult to dispose of, and provides no significant, additional environmental protection. Construction of a pipeline from Outfall 001 to Lake Catherine would be required to cross Wilson Creek, dirt roads, and State Highway 270. The estimated cost of installation would be approximately \$420,000 and would also offer no significant, additional environmental protection vs. the proposal.

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 UMETCO's requested modifications established that the requested changes do not represent a change from current conditions or current water quality in Wilson Creek therefore the proposal protects the natural environment which supports the designated fishery use.

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

If treatment is required, 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: "Wilson Creek Minerals Water Quality Standards Evaluation" and "Addendum to the December 2004 Wilson Creek Minerals Water Quality Standards Evaluation" attached to UMETCO'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.