

**BEFORE THE ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION**

**IN RE: REQUEST BY UMETCO MINERALS )  
CORPORATION TO INITIATE RULEMAKING TO ) DOCKET NO. 10-005-R  
AMEND REGULATION NO. 2 )**

**STATEMENT OF BASIS AND PURPOSE**

Petitioner, UMETCO Minerals Corporation ("UMETCO"), comes before the Arkansas Pollution Control and Ecology Commission ("Commission") for its request for adoption of the proposed mineral criteria changes to APC&E Regulation No. 2 to amend Water Quality Standards of the State of Arkansas, and submits the following Statement of Basis and Purpose.

1. On June 14, 2010, UMETCO filed its Petition to Initiate Third Party Rulemaking to Amend Regulation No. 2 with the Commission to propose the site specific mineral criteria for chloride, sulfate and total dissolved solids ("TDS"). On June 25, 2010, the Commission entered Minute Order No. 23 which granted UMETCO's petition and initiated the rulemaking process for the proposed mineral criteria changes for Wilson Creek.

2. The UMETCO mining site comprises approximately 375 acres located on Highway 270 five miles east from Hot Springs, Garland County, Arkansas. The vanadium ore mining operations were conducted by Union Carbide Corporation, which created the subsidiary corporation UMETCO. UMETCO is currently reclaiming the open-cut vanadium mine known as the "Wilson Mine" which includes a water treatment facility known as the "East Wilson Pond." As part of the reclamation process, upstream flow in Wilson Creek was diverted into the East Wilson Pond for treatment and release into Wilson Creek at a discharge point designated as Outfall 001. The NPDES permit issued by ADEQ to UMETCO authorizes the discharge of treated surface water drainage as part of the waste water treatment system for the Wilson Mine reclamation project. Analytical data indicates the discharge from East Wilson Pond will not meet the existing permit limitations for chloride, sulfate and TDS. UMETCO seeks to amend the mineral quality criteria for chloride sulfate and TDS.

3. Based on comments received from the Arkansas Department of Environmental Quality ("ADEQ") on the proposed changes to mineral quality criteria for Wilson Creek, UMETCO will submit to the Commission for final promulgation the following revised amendments to the mineral criteria for Wilson Creek:

(a) UMETCO withdraws its request to remove the Domestic Water Supply use designation for Wilson Creek.

(b) UMETCO proposes to amend the mineral criteria for Wilson Creek as follows:

- (1) Wilson Creek from a point approximately 0.85 mile upstream of Outfall 001 to Outfall 001:

TDS from 142 mg/L to 500 mg/L (*previously requested 543 mg/L*)

Sulfate from 20 mg/L to 250 mg/L (*previously requested 260 mg/L*)

Chloride from 15 mg/L to 56 mg/L (*no change-within the National Secondary Drinking Water Standard*)

- (2) Wilson Creek downstream of Outfall 001 to its mouth:

TDS from 142 mg/L to 500 mg/L (*previously requested 543 mg/L*)

Sulfate from 20 mg/L to 250 mg/L (*previously requested 260 mg/L*)

Chloride from 15 mg/L to 56 mg/L (*no change-within the National Secondary Drinking Water Standard*)

4. On August 28, 2009, UMETCO submitted to ADEQ the 2004 *Wilson Creek Minerals Water Quality Standards Evaluation* and the 2009 *Addendum to the December 2004 Wilson Creek Minerals Water Quality Standards Evaluation* (collectively, the "UAA") for review. ADEQ informed UMETCO by letter dated March 5, 2010, that the UAA satisfies the requirements outlined in Regulation No. 2.303, 2.306 and 2000 State of Arkansas Continuance Planning Process, Chapter IX. This document satisfies the information requirements of Section 2.306 of Commission Regulation No. 2 for site specific criteria for amending Regulation No. 2.

5. UMETCO has submitted documentation in accordance with requirements of Section 2.306 of Regulation No. 2, along with additional documentation as required pursuant to Regulation No. 8.

6. UMETCO's petition is supported as follows:

(a) The current chloride, sulfate, and TDS levels in Wilson Creek do not limit aquatic life based on the biological survey conducted. The UMETCO discharges from Outfall 001 do not limit the attainability of water supply uses, as to the extent that they occur. The TDS and chloride concentrations from UMETCO's discharge at Outfall 001 support the existing and attainable uses in Wilson Creek and Lake Catherine.

(b) On May 6, 2010, FTN Associates, Ltd. conducted a qualitative fish sampling study in Wilson Creek Cove of Lake Catherine to evaluate the possible effects of the UMETCO discharge for Outfall 001 on the fish community in Wilson Creek Cove. This study evaluated the kinds of fish species present in Wilson Creek Cove and the abundance based on habitat. The fish sampling results indicated the numbers and types of species captured and observed on Wilson Creek Cove consistent with an abundant and diverse fish community.

(c) There is no current economically feasible treatment technology for the removal of chloride, sulfate and TDS. Reverse osmosis treatment technology is not cost effective and generates a concentrated brine that is environmentally difficult to dispose of. Reverse osmosis treatment technology would not add any significant environmental protection to Wilson Creek.

(d) The proposed change in mineral criteria does not represent a change from current conditions or the current water quality in Lake Catherine which meets state water quality standards for minerals. The proposed change in mineral criteria will not increase the loading to Wilson Creek or Lake Catherine but will establish the mineral criteria for Wilson Creek at a level consistent with current conditions.

(e) The requested mineral criteria change does not conflict with the Arkansas Water Plan or any existing or potential drinking water supply.

Respectfully submitted,

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By



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**CERTIFICATE OF SERVICE**

I hereby certify that on this 3<sup>rd</sup> day of August, 2011, I served a copy of the foregoing Statement of Basis and Purpose on the following by United States Postal Service, postage prepaid, and by electronic service:

Ms. Jamie Ewing, Esq.  
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