ADMINISTRATIVE GUIDANCE DOCUMENT

Section 2.306 of Regulation No. 2 provides a procedure to change the water quality criteria applicable to a specific stream segment. This Administrative Guidance Document provides guidance to the Commission, to the regulated community, and to the general public on the manner in which petitions filed under Section 2.306 to change the water supply use, mineral quality criteria and/or to remove a water supply use will be processed, and the documentation which the Department deems necessary to obtain a favorable recommendation from the Department on the request.

1. Applicable Procedure

(a) All requests shall be submitted to the Department. The Department shall submit its comments and/or its recommendation upon the request in writing to the applicant within thirty (30) days of submission. Upon receipt of the Staff's comments, or after the expiration of thirty (30) days the petitioner may file the request with the Commission, at which time it will be assigned a docket number for third party rulemaking pursuant to Act 165 of 1993 and Regulation No. 8.

(b) Upon filing a request with the Commission, the request will be assigned to and reviewed by the Rules Subcommittee. The Rules Subcommittee may proceed with a rulemaking and refer the matter to the Commission upon completion of the public hearing and development of the rulemaking record, or take such other action as appropriate for the rulemaking proceeding. The petitioner should attend all meetings pertaining to the petition, including meetings of the Rules Subcommittee, the Commission and all public hearings on the petition. The petitioner should be prepared to present the petition, to respond to comments or questions from the public, the Department or the Commission. The petitioner should also be prepared to assist the Commission's Hearing Officer in drafting any documents required in the matter, including any final rule or decision.

2. Documentation Required for All Applications- A request to modify the dissolved minerals criteria and/or remove the water supply use should include the following documentation:

(a) Approximation of the existing effluent loading of dissolved minerals. Sampling data and process information to approximate the highest monthly average and daily maximum contributions of dissolved minerals which could be expected to

occur in the effluent under existing conditions, taking into account variability of process, treatment and other factors affecting the final effluent. Data should also include design discharge flows.

(b) A demonstration that existing water supply uses will be maintained. If the petition includes a request to remove the drinking water use, the petitioner should include letters from the Arkansas Department of Health ("ADH") which demonstrates that the stream segment has not been approved as, or is not known to be under consideration for use as a public water system source, and from the Arkansas Soil and Water Conservation Commission which demonstrates that the request does not conflict with the Arkansas Water Plan.

(c) A demonstration that existing aquatic life uses will be maintained.

(i) Bioassessments performed upstream and downstream of the point source which show no significant differences in aquatic life communities due to dissolved minerals. The type and extent of the bioassessment documentation will be site specific and will include data collected within the last five (5) years. Bioassessment activities may include:

1. Historical data analysis

2. Whole effluent toxicity testing, i.e., current (within the last year) whole effluent chronic toxicity testing of effluent using Ceriodaphnia dubia and Pimephales Promelas under critical conditions in accordance with standard requirements for NPDES permits as specified in Attachment XI of the CPP.

3. Benthic community sampling and analysis (e.g., Rapid Bioassessments)

4. Fish collection and analysis

As a general policy, in the majority of cases, collections of macroinvertebrate and fish communities in receiving waters will be required. If the result of the whole effluent toxicity testing indicate no toxicity related to the dissolved minerals at the critical dilutions, the in-stream study documentation can be minimized (e.g., limited rapid bioassessment and/or fish stations). Eco-regional approaches can be used for similar facilities.

(ii) If the point discharge represents the beginning of the receiving stream and no upstream monitoring is possible, the bioassessment data will also be collected at the first confluence where upstream and downstream stations can be established.

3. Additional Documentation for Petitions Seeking to Increase Dissolved Minerals Loadings- The Department may authorize dissolved minerals loadings in NPDES Permits which reflect loadings of dissolved minerals in excess of existing conditions, and will recommend approval of a request to make a corresponding revision to the dissolved mineral water quality criteria, upon submission of the following documentation in addition to that required under paragraph (2) above:

(a) Treatment for the dissolved mineral(s) has been or will be installed to the extent that treatment is technologically available and economically justifiable in comparison to the potential for dissolved mineral(s) removal and the attainment of water quality standards,

(b) The facility will have a sufficient impact on the economy of the area or is essential to the protection and promotion of the public interest, and approval of the petition will accommodate important economic or social development in the stream segment area.

(c) All other feasible processes to reduce minerals contaminants have been investigated, such as product substitution; reduction in wastewater by recycle, reuse or land application; seasonality controlled discharges; improved operations and maintenance of existing treatment systems, alternative discharge locations.

4. Mixing Zone- For purposes of calculating the appropriate water supply dissolved mineral criteria, the instream concentration of dissolved minerals may be calculated as the concentration of dissolved minerals, after mixing, using the harmonic mean flow,30th percentile flow, or 4 cfs, whichever is greater.

5. Permitting Strategy- A facility whose receiving streams' dissolved minerals criteria are amended under this policy to reflect existing discharge conditions shall be required to monitor and report its effluent dissolved minerals concentrations in NPDES permits.

6. Recommendation- If the bioassessment data submitted under Section 2(c) above demonstrate no impairment of the aquatic community, the Department will recommend approval of the request. If the bioassessment data indicates that the contribution of dissolved minerals impairs the aquatic community, the Department will evaluate all information submitted and make such comment on the request as may be appropriate under the circumstances.

Approved this 12th day of January, 1994.

Randall Mathis, Director