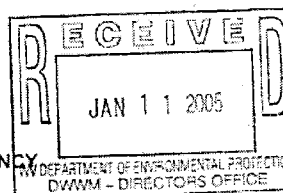


EXHIBIT N



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III

1650 Arch Street
Philadelphia, Pennsylvania 19103-2029



JAN 9 2006

Lisa McClung, Director
Water and Waste Management Division
West Virginia Department of Environmental Protection
601 57th Street, S.E.
Charleston, West Virginia 25304

Dear Ms. McClung:

The West Virginia Environmental Quality Board (EQB) submitted complete packages in support of a revision to its *Requirements Governing Water Quality Standards* (WQS regulations) to the U.S. Environmental Protection Agency (EPA), on January 13, 2005, and May 23, 2005.¹ The State submitted this revision for EPA review, pursuant to Section 303(c)(1) of the Clean Water Act (CWA) and 40 C.F.R. Part 131. In the first submission, the revision was adopted through an emergency rule. Following the emergency rule, the West Virginia Legislature enacted the revision as a permanent modification of the regulations. The WQS regulations as modified by the Legislature were then resubmitted to EPA.

The revision to the West Virginia WQS regulations temporarily modifies the chronic aluminum criterion from 87 $\mu\text{g/L}$ to 750 $\mu\text{g/L}$ for all waters except for trout waters (in trout waters, the chronic aluminum criterion of 87 $\mu\text{g/L}$ continues to apply). The purpose of this letter is to approve West Virginia's revised aluminum criteria as consistent with the requirements of the CWA and the applicable Federal regulations at 40 C.F.R. Part 131. The specific provision that EPA is approving in accordance with Section 303(c)(3) of the CWA and 40 C.F.R. Part 131 and the rationale for the approval are enclosed with this letter. West Virginia's revised Water Quality Standards approved today are now effective for CWA purposes.

Please note that the State regulatory language provides that the modification of the aluminum chronic criteria apply only until July 4, 2007. Under the State regulations, in July 4, 2007, the chronic criterion will revert to 87 $\mu\text{g/L}$ dissolved aluminum applicable in all waters,

¹ The submissions by West Virginia were deemed complete when EPA received the certification from the State Attorney General that the revisions were duly adopted pursuant to State law. See 40 C.F.R. 131.6. EPA received West Virginia's Letter of Certification on May 26, 2005.

which was previously approved by EPA. Nonetheless, EPA's approval of the criteria as modified is based on a finding that the criteria are protective of the aquatic life use regardless of whether they apply temporarily or permanently.

Under the Endangered Species Act (ESA), EPA has the obligation to determine if our approval of this modification to West Virginia's Water Quality Standards regulation will adversely affect threatened and endangered species and their critical habitat in West Virginia. EPA has initiated the consultation process required under Section 7(a)(2) of the ESA. As part of this process, EPA has conducted a biological evaluation that finds that our approval action will not likely adversely affect these species or their critical habits. We are approving the West Virginia revised aluminum criteria pending completion of ESA section 7(a)(2) consultation with the U.S. Fish and Wildlife Service. Please note that in approving West Virginia criteria subject to the consultation, EPA may need to revise its approval decision if the consultation identifies a situation where the approved criteria may not be adequate.

If you have any questions concerning this letter please contact Ms. Cheryl Atkinson at (215) 814 3392.

Sincerely,



Jon M. Capacasa, Director
Water Protection Division

**EPA Region III Approval Rationale
West Virginia Amendments
Virginia Title Legislative Rule Series I
Requirements Governing Water Quality Standard**

The revision to the aluminum criteria submitted by West Virginia to EPA consists of a footnote applicable to the aluminum chronic criteria, which reads:

e. Until July 4, 2007, the aluminum criteria will be implemented as follows: the chronic aluminum criterion shall be 87 $\mu\text{g/l}$ for trout waters (as defined in section 2.20 of this rule)² and shall be 750 $\mu\text{g/l}$ for all other water of the states. The implementation of the interim criteria provides time for a study to develop aluminum criteria for water of the state, which are based upon sound science and are protective of aquatic life.

Prior to this revision, West Virginia regulations included EPA-approved acute and chronic aluminum criteria of 750 $\mu\text{g/L}$ and 87 $\mu\text{g/L}$ dissolved aluminum respectively, applicable to all waters designated for aquatic life use.³ The effect of the revision is to amend the aluminum criteria as follows:

- Freshwater Acute Criterion = 750 $\mu\text{g/L}$ dissolved aluminum (applicable in all waters) and,
- Freshwater Chronic Criteria = 87 $\mu\text{g/L}$ dissolved aluminum (applicable in trout waters only) and 750 $\mu\text{g/L}$ dissolved Aluminum (applicable in non-trout waters).

West Virginia modified its aluminum criteria thus, in light of stream data presented by the WV Department of Environmental Protection, which purports to show, that waters that are considered impaired based on the chronic aluminum criterion of 87 $\mu\text{g/l}$ have thriving aquatic communities and have no physical signs of impairment.

The revision at hand does not impact the acute criterion, which EPA approved in April

² Section 2.20. "Trout waters" are streams or stream segments which sustain year-round trout populations. Excluded are those streams or stream segments which receive annual stockings of trout but which do not support year-round trout populations. Appendix A of the West Virginia regulations lists state waters designated as trout waters.

³ EPA has approved the application of West Virginia's aluminum criteria to dissolved aluminum as protective of aquatic life. See EPA's April 17, 2003 approval letter sent to West Virginia.



2003. Further, the revision only impacts non-trout waters. Thus EPA considered whether the chronic criterion as revised still protects the aquatic life use in those waters. Although the modification of the chronic criterion is applicable only until July 4, 2007, EPA's review under the CWA of the criterion is no different than if the criterion applied permanently: whether the criterion as modified is protective of the use.

Discussion of EPA's Review

EPA's recommended aquatic life aluminum criteria of 87 $\mu\text{g/l}$ for chronic exposure and 750 $\mu\text{g/l}$ for acute exposure were published in the 1988 document *Ambient Water Quality Criteria for Aluminum* (EPA 440/5-86-008, August 1988). Using EPA's 1985 guidelines for deriving criteria for protection of aquatic life, the final chronic value for aluminum calculated from chronic toxicity data was 748 $\mu\text{g/L}$, which would have supported a chronic criterion of 750 $\mu\text{g/L}$. However, because some data showed greater toxicity of aluminum to brook trout and striped bass specifically, EPA decided to lower the chronic criterion to 87 $\mu\text{g/l}$ in order to protect these two recreationally important species.

West Virginia has retained the chronic 87 $\mu\text{g/l}$ aquatic life aluminum criterion for trout streams. For all other, West Virginia has amended its 87 $\mu\text{g/l}$ chronic criterion to 750 $\mu\text{g/l}$. This is consistent with the rationale supporting EPA's recommended criteria. Trout are protected by the lower chronic criterion, but in all other waters, the criterion calculated through EPA's guidelines is protective of the aquatic life use. Striped bass, the other species which led to the adoption of a lower recommended chronic criterion, is not a recreationally important species in West Virginia waters. It is not a native species of West Virginia waters - striped bass is an anadromous fish which must spend part of its life cycle in salt water, while West Virginia is a landlocked state. West Virginia does not stock striped bass in its waters; specimens occasionally found in West Virginia are likely to be from the fish stocked in neighboring states. While West Virginia does do annual stocking of hybrid striped bass, hybrid striped bass does not reproduce naturally and thus does not form natural populations. Therefore, other than in trout waters, there is no reason to lower the chronic criterion calculated using EPA guidelines.

As provided in the West Virginia regulations, the modification of the aluminum criteria is effective only till July 4, 2007. In that date, the applicable chronic criterion reverts to 87 $\mu\text{g/L}$ in all waters. EPA already deemed that criterion protective, and in any case, it would be more protective than the criterion which the Agency is hereby approving.

In light of these considerations, West Virginia's criteria for aluminum as revised are protective of the aquatic life use.