From: Linda Choi
To: 15ANCAC02B_SWTriRev_Comments_2021
Subject: [External] Free and total cyanide
Date: Wednesday, July 21, 2021 10:21:32 PM

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Dear NC DEQ-DWR Planning Department:

I am a resident at Badin Lake and a supporter of Protect Badin Lake and Yadkin River Keeper, but mostly importantly a citizen seriously concerned about water quality.

Hazardous waste disposal sites at Alcoa's Badin Business Park continue to leak cyanide and fluoride, among other chemicals, into Badin Lake and Little Mountain Creek. As recently as April of this year, Alcoa reported exceedances in its monthly average for both cyanide and fluoride at Outfall 005 (the outfall that flows directly into Little Mountain Creek and into Lake Tillery's drinking water) under its current NPDES Storm Water Permit. We are frustrated and confused as to why the Division of Water Resources has not taken enforcement action on what appears to be a clear violation of effluent limitations of Alcoa Badin Business Park's permit. We are also concerned that the proposal in the Triennial Review to allow compliance by measuring EITHER "Free" OR "Total" cyanide will make it easier for Alcoa to comply with its permit limits in the future and provide less protection to the environment.

From what I understand, the current proposed changes to the ambient water quality standard for cyanide by measuring either "free" cyanide OR "total" cyanide appears to be another example of how the state is making a rule change just to make it easier for Alcoa to comply with its existing permit limits. Monitoring Badin Lake and Alcoa's discharge should never be about how we can make things easier or even cheaper for the regulated community. Rather it should be about the protection of public health and the environment. Even the state's own regulatory analysis admits that allowing for the measurement of free cyanide is less strict.

Specifically, the proposal to allow the use of either a free OR total cyanide should be changed to require the measurement of BOTH F**ree** AND T**otal** cyanide to ensure the greatest level of protection. We support measuring free cyanide in order to make sure we are testing for the most bioavailable and potentially toxic forms of cyanide, which is currently not the case. However, I would ALSO like to see the definition of free cyanide be written to include hydrogen cyanide, cyanide ions, and the "weak acid dissociable" or WADs.

At the same time, I feel it is important to maintain the TOTAL cyanide measurements since TOTA**L** cyanide is what has been used under existing permit requirements and the rules should not change midterm. How would anyone be able to compare results when now "apples wouldn't be compared to apples"?

I hope you will reconsider not making this an "either or" proposition but require that **both free and total cyanide** be measured and used for regulatory permits.

Linda Patel