

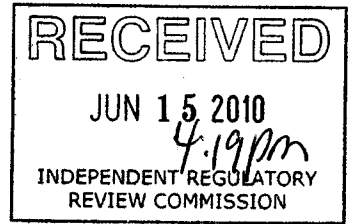


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Balanced Environmental Solutions

June 14, 2010



Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477

RE: Proposed Rulemaking: Ambient Water Quality Criterion; Chloride (Ch)

Dear Board Members:

Attached are the comments of Blazosky Associates, Inc. (BAI) on the proposed chloride water quality criterion. As an environmental consulting firm since 1986, we offer services primarily to the mining and waste management industries as well as to various other public and private sector organizations.

Caring about the environment, we certainly understand that the total dissolved solids concern is a serious and significant issue to evaluate and perhaps regulate. However, we believe that the regulations as written will cause significant harm to the industries we represent. The consequences of adopting this regulation will be far more significant than envisioned in these documents. The costs to comply are significantly underestimated and the approach is simply not sustainable.

Although we realize the pressure to adopt such regulations because of the boom in the gas industry, we ask that you step back and reconsider this approach. Perhaps recycling the brine is a more palpable approach for all to accept.

Sincerely

Blazosky Associates, Inc.

John J. Blazosky
John J. Blazosky, P.E.

JB/av

Comments
Chapter 93 Water Quality Standards
Ambient Water Quality Criterion; Chloride (Ch)
May 1, 2010

- The proposed regulations will significantly impact all industrial wastewater treatment. Chlorides are only one component of Total Dissolved Solid (TDS). Efforts (i.e., costs) to remove chlorides utilizes the same methodology as to remove other TDS components such as calcium and carbonate which may be elevated due to treatment, i.e. lime addition for metals removal. The technology is not cation or anion specific.
- For discharges to mine drainage streams, the R/O process reaction removes potential constituents that would normally assist the stream with calcium and carbonate which add alkalinity.
- In particular, the proposed regulations would impact all landfills since landfill leachate typically has elevated level of chlorides. Landfills do not presently treat for chlorides.
- The projected Reverse Osmosis cost of one cent for "low strength brine" is simply incorrect as RO processes are much more expensive (easily 7-20 times per gallon more than projected).
- None of the costs consider disposal of the reject concentrated brine generated *from* the RO unit which would go to a landfill only to re-circulate and further increase leachate strength. It is a closed loop that is not sustainable!
- Why evaporate water and use energy to generate road salt?
- It is ridiculous to think that brine salts from treatment should be used as road salt - only to convey pollutants back to the streams you are attempting to protect. This is a loop system which is open to the environment and therefore not sustainable.
- Requiring compliance of chlorine limits at any point in a stream (i.e., "end of pipe" limits) doesn't consider the assimilative capacity of the receiving stream. Establishing mixing zones and "live stream flow monitoring" would allow higher levels of discharge without consequences to the stream. The technology is there to do this.
- Perhaps it would be best to eliminate new discharges of chlorides or require treatment for discharge to certain streams where impacts have been identified.

Overall it would seem that this criterion is an overreaction which will add significant costs (in many instances without necessity) and for which the proposed solution is not sustainable.

Respectfully Submitted,



John J. Blazosky, P.E. DEE

Blazosky Associates, Inc.

June 14, 2010



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From: Karen Finlan [karenf@blazosky.com]
Sent: Tuesday, June 15, 2010 11:30 AM
To: EP, RegComments
Subject: Comments to Ambient WQ Criterion - Chloride Proposed Rulemaking
Attachments: EQBclorides.pdf

Please accept and consider the attached comments from Blazosky Associates, Inc. on the referenced Proposed Rule, due today, June 15, 2010.

Karen E. Finlan
Office Manager
Blazosky Associates, Inc.

