

September 13, 2022



Independent Regulatory Review Commission
333 Market Street
14th Floor
Harrisburg, PA 17101

RE: Regulation #7-553: Water Quality Standard for Manganese and Implementation

Dear Commissioners:

As a bituminous coal operator for over 45 years, Chairman of the Mining and Reclamation Advisory Board for over 17 years (MRAB), and current and past Chairman of the Pennsylvania Coal Alliance and Pennsylvania Coal Association, I would like to encourage the Independent Regulatory Review Commission to disapprove Regulation #7-553: Water Quality Standard for Manganese and Implementation.

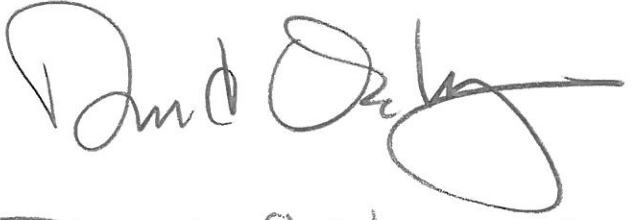
As a bituminous coal operator, I have firsthand field experience in treating for several metals that are present in the discharges in Pennsylvania's coal fields, including manganese, and am also very familiar with the challenges associated with treatment and the balance required to ensure discharges meet all regulated criteria. Treating for manganese, in most cases, requires an elevated pH generally above 9.0, and sometimes as high as 10.5 for effective precipitation. While this can be accomplished, it also provides challenges, as aluminum precipitates at a pH of 5.0, but enters solution again at a pH of 9.0. Therefore, excessive treatment for manganese results in aluminum, which is harmful to aquatic life, going back into solution. Further complicating the management of the pH, the water quality criteria for pH is between 6.5 and 9.0, meaning raising the pH above a 9.0 is a violation of the water quality criteria. As such, the Pennsylvania Department of Environmental Protection's (DEP) and the Environmental Quality Board (EQB) are not proposing a final regulation that has a practical, field approach to manganese treatment, as treating to 0.3 mg/L is next to impossible for most discharges.

While DEP and EQB developed the proposed regulation prior to consulting with the MRAB, once a presentation was finally made to the MRAB, numerous questions on treatment technology, success rate at different flow levels, and cost were asked. As Chairman, I am disappointed that the MRAB has yet to receive a response from DEP or any evidence that treating to such a low level is possible in acidic waters. It is evident, given the lack of information or field data, that DEP and the EQB do not have the experience or data that demonstrates treating to a 0.3 mg/L standard is achievable.

Further, DEP has failed to assess the impact the regulation will have on Post Mining Discharge O&M Bonds or Trust Agreements. At the July 2022 meeting of the MRAB, 68 Post Mining Discharge O&M Bonds totaling \$242 million have been established, and 62 fully funded and 12 partially funded Trust Agreements have been established at a price tag of over \$305 million.

Most, if not all, of the Bonds and Trusts have manganese treatment associated with them. Should the effluent limitation for manganese be reduced to 0.3 mg/L, every Bond and Trust will be inadequate as the cost to treat manganese will skyrocket, resulting in fewer resources for future treatment. DEP also fails to acknowledge the hundreds if not thousands of acid mine drainage sites, pre-1977 and post 1977, that currently do not treat for manganese, and has not made an assessment of the cost to the state and taxpayers should those sites comply with a 0.3 mg/L toxicity standard. Considering this, it is difficult to understand the objective of this regulation, if only private industry must comply and the state does not.

Lastly, The U.S. Environmental Protection Agency has not classified manganese as toxic, nor has any other state in the nation for an in-stream criteria. DEP and EQB's justification for establishing a toxicity standard does not rely on the most recent science, and their rationale, which is based on a hypothetical scenario of infant ingesting massive amounts of stream water, is extreme at best.


David Osikowicz