September 8th, 2022



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

Re: No. 3260 Environmental Quality Board #7-553: Water Quality Standard for Manganese and Implementation

Corsa Coal Corp. and its subsidiaries operate multiple coal mining facilities in Somerset County, Pennsylvania, and employ over 300 men and women. Corsa's operations include over twenty distinct water treatment sites with NPDES permits that would be directly impacted by this proposed rulemaking. These water treatment sites treat and discharge over 2.5 billion gallons of water per year; almost 5,000 gallons of water per minute every day of the year. Many of these sites have operated for more than 30 years with thriving downstream aquatic and recreational uses.

Corsa Coal also operates a mining facility in Western Maryland, and at that location, the manganese standard is a 2.0 mg/l limit on the Casselman River. Maryland has made no mention of revising the manganese limit so there is no doubt that the proposed rulemaking would place Pennsylvania mining companies at an unnecessary disadvantage with neighboring coal mining states.

Corsa Coal has extensive experience in how to treat water from mining sites and we can foresee many of the challenges and hardships that would be imposed by a change from the existing 1.0 mg/l limit to a 0.3 mg/l limit. The basics of water treatment at this level will be driven by alkaline chemical addition to the water, either with sodium hydroxide (caustic soda) or a lime-based product (calcium hydroxide). While water treatment with alkaline chemicals is routine and ongoing, the required amount of treatment required lower manganese concentrations from 1.0 mg/l to 0.3 mg/l is not a linear incremental change but a logarithmic change, increasing pH one point is a tenfold increase. This could represent as much as a doubling of the required alkaline chemical addition already being applied. This increase in chemical usage would cost Corsa in excess of one million dollars a year. The chemical treatment would also cause the need to reduce pH levels, by applying acid, before treated waters discharge to a receiving stream.

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Large increases in both alkaline and acidic chemical usage are not solely a cost concern but also a water quality concern. As the rate of chemical usage increases the amount of dissolved solids in the water also increases. The net effect of this increased water treatment is that the water becomes increasingly salinized which can cause stress to aquatic life and result in situations like the 2009 Dunkard Creek incident.

If the Commonwealth is serious about protecting water quality from manganese impairments, they should also impose the proposed manganese limit reduction at the numerous abandoned mine sites where they are responsible for water treatment. Currently, these sites under the Department's jurisdiction, discharge water well above the 1.0 mg/l limit.

Sincerely,

David B. Gardner, P.E. Mining Engineer, Corsa Coal Corporation President, Pennsylvania Mining Professionals

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