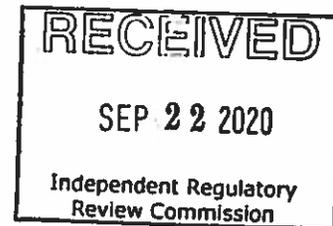


September 18, 2020

Environmental Quality Board
P.O. Box 8477
Harrisburg, PA 17105-8477
RegComments@pa.gov



RE: PROPOSED RULEMAKING
ENVIRONMENTAL QUALITY BOARD
[25 PA. CODE CHS. 93 AND 96]
Water Quality Standard for Manganese and Implementation
[50 Pa. B. 3724]

Dear Environmental Quality Board:

The Reading Area Water Authority **supports** the proposed rulemaking to amend Chapters 93 and 96 (relating to water quality standards; and water quality standards implementation).

Specifically, The Reading Area Water Authority **supports** the Environmental Quality Board's (EQB) proposal of a new numeric human health criterion for manganese of 0.3 mg/L in Chapter 93.8 (Water Quality Criteria for Toxic Substances) and the deletion of the existing 1 mg/L standard because it is not protective of human health. The new proposed 0.3 mg/L toxic health standard would apply to all discharges going into surface waters, just as the existing 1 mg/L standard.

The Department of Environmental Protection (DEP) reviewed the effects of manganese on human health and determined that current science shows manganese is harmful to human health as a possible nervous system toxin with implications to early childhood development at levels that are less than the threshold levels that impact aquatic life.

DEP believes the new proposed 0.3 mg/L toxic health standard will protect human health from the neurotoxicological effects of manganese, as well as ensure adequate protection of all water uses.

The EQB is also proposing for public comment, two alternatives for a point of compliance with the manganese water quality standard:

1. The point of all existing or planned surface potable water supply withdrawals; or

2. All surface waters (that is, near the point of discharge).

However, the proposed amendments, set forth in Annex A, support both alternatives.

The Reading Area Water Authority **supports maintaining the current point of compliance for manganese**, in all surface waters (that is near the point of discharge), as stated in § 96.3 (c).^[i]

Water suppliers have been greatly concerned with the legislative provision included in the Administrative Code (Act 40 of 2017) to require the EQB to set a water quality standard for manganese. Act 40 would shift the burden for treating manganese discharges from mine sites and other sources from those polluting the water to those using the water, like public water suppliers. The consequence would put the entire burden of meeting the manganese standard on water suppliers at a significant cost, as the 1 mg/L standard is **20 times** the level of manganese that water suppliers can have in their water supplies (.05 mg/L) in accordance with EPA and DEP's secondary maximum contaminant levels (SMCLs).^[ii] Pennsylvania enforces SMCLs, as they assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor complaints. At relatively low concentrations (0.02 mg/L or greater), manganese can cause discolored water (usually black or dark red/brown), staining of laundry and plumbing fixtures and increased turbidity. At higher levels, manganese can create a metallic taste in water (0.1 mg/L or greater). These are significant concerns for both water customers and water suppliers.

Therefore, water suppliers monitor for manganese in their source water to make sure they can properly treat it before it becomes a problem. Moving the point of compliance for manganese would result in higher levels of manganese in the source water causing water systems to experience increases in monitoring costs and increases in treatment costs. For example, DEP staff informed the WRAC that 280 of the 340 surface water treatment plants in the state would have to evaluate whether to make treatment changes if the manganese compliance point were moved without the addition of a stricter standard upstream.^[iii]

The Reading Area Water Authority would need to add an alternative treatment process with a projected construction cost of \$2.1 million and a 20-yr operating cost of \$15.8 million plus \$540,000 per year in increased treatment chemical costs; and \$ 6,530 annually for increased monitoring after a start-up cost of \$13,000. These costs would be passed on to the rate paying public, essentially taxing them for the otherwise private concern of pollution generating businesses. With our service population being one of the poorest in the state, this is wholly indefensible.

Finally, it is also important to note that manganese does not degrade – **dilution is NOT the solution** – so it must be addressed through treatment or mitigation at the point of discharge. Fundamentally, reducing pollution into our waterways should be the responsibility of the generator of that pollution, at the point of discharge, and NOT the public water supplier at the point of water supply intake.

Even the **0.3 mg/L** standard proposed by the EQB would still be significant and water suppliers also have a National Pollutant Discharge Elimination System (NPDES) permit so they will be

discharging the manganese that they remove and it will get solidified in their sludge – costing them on both ends of the treatment process. **However, meeting the proposed 0.3 mg/L standard in their NPDES permit would not be as costly to water suppliers as it would if the Act 40 change were done alone.**

It is also important to note that it is easier and less expensive to treat manganese on the NPDES side of the equation, whether it be the water supplier's wastewater or solids. However, the NPDES permit will not automatically be changed to 0.3 mg/L – it will be reviewed when the NPDES permit is renewed and it will depend on the level of manganese in the source water. In addition, DEP does not expect this to impact many wastewater treatment plants; thus in no way reducing the costs of treatment for the public water suppliers.

[i] 25 Pa Code Chapter 96.3

<http://www.pacodeandbulletin.gov/Display/pacode?file=/secure/pacode/data/025/chapter96/s96.3.html&d=reduce>

[ii] USEPA, Secondary Drinking Water Standards: Guidance for Nuisance Chemicals

<https://www.epa.gov/sdwa/secondary-drinking-water-standards-guidance-nuisance-chemicals>

[iii] “Pa. DEP to propose stricter manganese standard as studies suggest risks to children,” Pittsburgh Post-Gazette, 9/23/2019

<https://www.post-gazette.com/business/powersource/2019/09/23/Pennsylvania-DEP-water-manganese-standard-health-coal-pollution-rules/stories/201909220048>