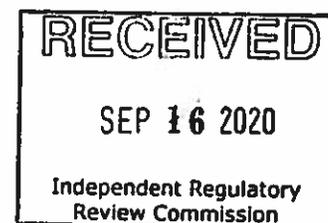


Testimony for Water Quality Standards for Manganese and Implementation

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Testifying on behalf of The York Water Company



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

Specifically, The York Water Company **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 York Water Company **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).

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 (0.05 mg/L) in accordance with EPA and DEP's secondary maximum contaminant levels (SMCLs). 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 due to the need to modify existing treatment processes or to provide additional treatment. 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.

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.