MINUTES
ENVIRONMENTAL QUALITY BOARD MEETING
August 9, 2022

VOTING MEMBERS AND/OR ALTERNATES PRESENT

Ramez Ziadeh, Chair, Acting Secretary, Department of Environmental Protection
Sam Robinson, alternate for Allison Jones, Secretary, Governor's Office of Policy and Planning
Greg Hostetter, alternate for Russell Redding, Secretary, Department of Agriculture
Adam Walters, alternate for Neil Weaver, Acting Secretary, Dept. of Community & Economic Development
Peter Blank, alternate for Dr. Denise Johnson, Acting Secretary, Department of Health
Patrick McKenna, alternate for Jennifer Berrier, Secretary, Department of Labor and Industry
Nathan Walker, alternate for Yassmin Gramian, Secretary, Department of Transportation
Heather Smiles, alternate for Tim Schaeffer, Executive Director, Pennsylvania Fish and Boat Commission
Donald Wandling, alternate for Bryan Burhans, Executive Director, Pennsylvania Game Commission
Andrea Lowery, Executive Director, Pennsylvania Historical & Museum Commission
Gladys Dutrieuille, Chair, Public Utility Commission
Nick Troutman, alternate for Senator Gene Yaw, Senate Environmental Resources & Energy Committee
Emily Eyster, alternate for Senator Carolyn Comitta, Senate Environmental Resources & Energy Committee
Glendon King, alternate for Rep. Daryl Metcalfe, House Environmental Resources & Energy Committee
Representative Greg Vitali, House Environmental Resources and Energy Committee
Bob Barkanic, Citizens Advisory Council
Cynthia Carrow, Citizens Advisory Council
James Schmid, Citizens Advisory Council
John St. Clair, Citizens Advisory Council
John Walliser, Citizens Advisory Council

DEPARTMENT OF ENVIRONMENTAL PROTECTION STAFF PRESENT

Laura Griffin, Regulatory Coordinator
Brian Chalfant, Acting Policy Director
Robert "Bo" Reiley, Bureau of Regulatory Counsel

CALL TO ORDER AND APPROVAL OF MINUTES

The hybrid meeting of the Environmental Quality Board (EQB or Board) was called to order by Chairperson Ziadeh at 9:03 a.m. The Board considered its first item of business: approval of the July 12, 2022, EQB meeting minutes.

Representative Vitali made a motion to adopt the July 12, 2022, EQB meeting minutes. Gladys Dutrieuille seconded the motion, which the Board unanimously approved (19-0).

Final Rulemaking: Additional RACT Requirements for Major Sources of NOx and for the 2015 Ozone NAAQS VOCs (25 Pa. Code Chapter 121 and 129)

Krishnan Ramamurthy (Deputy Secretary for Office of Waste, Air, Radiation, and Remediation) provided an overview of the final rulemaking. Mark Hammond (Director for Bureau of Air Quality), Jesse Walker (Assistant Counsel for Bureau of Regulatory Counsel) assisted with the presentation.

There was no discussion following the Department's presentation.

> **Representative Vitali made a motion to adopt the final rulemaking. James Schmid seconded the motion, which was approved by the Board (17-2). Nick Troutman (alternate for Senator Gene Yaw) and Glendon King (alternate for Representative Daryl Metcalfe) voted in opposition.**

Final Rulemaking: Water Quality Standards for Manganese and Implementation (25 Pa. Code Chapters 93 and 96)

Lisa Daniels (Acting Deputy Secretary for Water Programs) provided an overview of the final rulemaking. Manyi Liu, (Director for Bureau of Clean Water), Josh Lookenbill (Bureau of Clean Water), Kristen Schlauderaff (Bureau of Clean Water), and Michelle Moses (Assistant Counsel for Bureau of Regulatory Counsel) assisted with the presentation.

Following the Department's presentation, Nick Troutman noted that DEP derived the criterion for manganese based primarily on the U.S. Environmental Protection Agency's (EPA) risk assessment data and asked if there is a national criterion. Josh Lookenbill responded that there is a national potable water supply criterion recommended by the EPA of 0.05 milligrams per liter (mg/L) for human health consumption of water plus organisms, and the human health criterion for the consumption of organisms is 0.1 mg/L. Troutman asked if Pennsylvania would be the only coal mining state with a manganese criterion that is a toxic standard for effluent discharge at end of pipe. Lookenbill responded that the criterion is not an end of pipe criterion, but an ambient surface water quality criterion to be met in-stream, which is different than the effluent guidelines for the mining industry and also different than the technology based end of pipe requirement for the drinking water industry. Effluent discharges would not automatically get a 0.3 mg/L limit at the end of pipe. Troutman then asked if the criterion would hurt the competitiveness of Pennsylvania's coal and noncoal mining industries in the long term. Josh Lookenbill cited neighboring states' standards that are similar, such as New York's public water supply criterion of 0.3 mg/L and West Virginia's criterion of 1.0 mg/L, as evidence that the criterion would not affect Pennsylvania's competitiveness. Nick Troutman also inquired if DEP consulted with PennDOT on how the rulemaking could impact their PAG-02 and PAG-03 permits for construction activities. Josh Lookenbill confirmed that the Department consulted with PennDOT and asked about that issue but PennDOT expressed no concerns, also noting that there is due diligence through the permitting process to evaluate contaminants in general which would address manganese.

Glendon King asked if the regulation is more stringent than federal standards. Josh Lookenbill responded that the federal recommendations are for potable water supply, so it is difficult to compare this human health criterion to a potable water supply criterion because they protect different ends. King then asked if the Department has a toxicologist on staff who worked on the regulation. Lookenbill stated that the

Department does not have a toxicologist, but consulted with the Pennsylvania Department of Health, the EPA, and a toxicologist at Drexel University.

Glendon King noted that the Department is responsible for several abandoned mine drainage (AMD) and bond forfeiture (post-1977) sites. King asked if DEP treats for manganese at those sites and, if so, to what level. Lookenbill responded that some are treated for removal of manganese and the levels vary from site to site. King said from his understanding a large majority of sites are not treated to the level that is proposed in this regulation and asked if the standard would apply to the AMD and bond forfeiture sites the Department handles. Lookenbill responded that the criterion would be applied to the permitted discharges through the National Pollutant Discharge Elimination System (NPDES) programs and the Department would evaluate these sites and prioritize treatment for manganese as money is available.

Glendon King asked if Act 40 of 2017 requires the Department and EQB to immediately propose a regulation or does it also require the Department and EQB to finalize the regulation. Michelle Moses responded that the Act directed the board to propose a regulation that moves the point of compliance for manganese from the point of discharge to the point of potable water supply withdrawal. Moses also pointed out that the proposed regulation included language consistent with that mandate and confirmed that the Department had met its obligations and satisfied the intent of Act 40. King disagreed with the Department's interpretation of what Act 40 requires DEP to do, asserted that the intent and language of Act 40 was clear, and concluded that DEP was not complying with the law.

King questioned whether including two alternatives in the proposed rulemaking complied with the Commonwealth Documents Law. Moses responded that the proposed regulation was developed in a manner that complied with the Regulatory Review Act, the Commonwealth Documents Law and the Commonwealth Attorneys Act. Moses added that including more than one regulatory option is permissible as long as the public has clear notice of what it is that they are commenting on, noting the rulemaking documents discussed each alternative at length to provide water users and the public sufficient information to provide informed comments on the rulemaking. King asked if the Department could have finalized the regulation without changes from the proposed version. Moses responded that if one of the alternatives that was in the proposed regulation was present in the final-form regulation, it could be finalized.

Representative Vitali commented that the legislative intent of the language in Act 40 of 2017 specifically related to this rulemaking is not clear at all. Rep. Vitali noted that the provision was added to the Administrative Code bill in the final hours before it was voted on and legislative members were largely unaware of its addition, which calls into question the legislature's intent. Rep. Vitali concluded that adding the provision late in the lawmaking process probably violated several constitutional requirements.

John St. Clair suggested the Department should use West Virginia as a case study to identify potential adverse impacts since they are a coal mining state that has enacted the 1.0 mg/L standard for public water supply intakes and asked if the Department was aware of any adverse impacts to West Virginia's water quality. Josh Lookenbill responded that DEP has looked at other mining states, including Alaska and Wyoming, who have more restrictive manganese water quality criteria; however, Pennsylvania does not evaluate other states' programs or permits and states do not monitor or evaluate the criterion's impact to human health.

St. Clair then asked what percentage of manganese sources comes from regulated sources. Lookenbill explained that it is unclear what percentage of manganese concentrations or loads come from regulated

sources as both active mining sites and abandoned discharges can vary. St. Clair then asked if the vast majority of manganese sources were unregulated sites because that would minimize the regulation's impact to improve water quality. Lookenbill responded that even if a waterway is already impaired for manganese, there is no exemption for regulated entities from complying with water quality standards, because that would negate the ongoing efforts to improve water quality in general. However, there are mining operations where the Department has implemented enforcement discretion and while those operations are currently not meeting water quality standards, they are meeting technology-based limits.

St. Clair asked how the Department would comply with the 0.3 mg/L standard at the alternative bonding sites it manages because they do not have NPDES permits. Lookenbill explained that the treatment utilized at bond forfeited sites is driven by the funding that is available. Lookenbill said that there are also remining sites that are not held to the water quality standard and that the purpose of both programs is to improve water quality. Lookenbill added that an effort would be made to meet the 0.3 mg/L standard and that funding from the federal Bipartisan Infrastructure Law would probably be used in that effort.

St. Clair asked for clarification on the two different points of compliance and the current standard. Lookenbill explained the current standard is 1.0 mg/L applied at the end of the discharge pipe and was set at a level to protect potable water supplies, and that it is a technology-based limit so regardless of the volume of discharge from that operation and the volume of the receiving water body, the facility has to meet 1.0 mg/L at the end of the pipe. Lookenbill then explained the two alternatives in the proposed regulation: the first would move the point of compliance for the current 1.0 mg/L standard from the end of the discharge pipe to the nearest downstream public water supply intake. Lookenbill explained that the second proposed alternative would change the standard from a public water supply criterion of 1.0 mg/L measured at the end of the discharge pipe to a human health criterion of 0.3 mg/L that would be measured for compliance in-stream.

St. Clair asked how moving the point of compliance to the intake would not be protective of public water supplies. Lookenbill responded that relaxing the requirements on an industry that discharges a pollutant will increase the load of that pollutant into the waterway and that increased load will be received by downstream users. Any increase in the concentration of manganese will increase the load to the receiving stream and therefore increase treatment costs for public water suppliers downstream of the increased load. Lookenbill added that conventional treatment used by public water suppliers is not effective for manganese if the concentration in the water at the intake is 0.3 mg/L or higher, so suppliers would need additional treatment and monitoring. St. Clair asked if the standard has to be 0.3 mg/L at the public water supply intake, then any upstream discharges would have to make sure to reduce their manganese load to make sure that 0.3 mg/L was met. Lookenbill responded that the first alternative, to move the point of compliance to the public water supply intake, did not preclude an increase in the concentration of manganese being received by water suppliers. Lookenbill reiterated that water suppliers currently receive a concentration of manganese and any increase upstream would result in an increase at the public water supply intake, regardless of whether it is above or currently below 0.3 mg/L. Lookenbill further explained that if the standard is applied somewhere downstream from the discharge at a public water supply intake it does not regulate the concentrations of manganese anywhere else in the stream where there is no public water supply intake. The federal effluent limitation guidelines are not protective of human health and it is unclear if they are protective of aquatic life. Lookenbill concluded that moving the point of compliance would reduce the protections for manganese to a much smaller area of Pennsylvania's surface waters.

St. Clair questioned why the entirety of a stream should meet drinking water quality standards. Lookenbill responded that the 0.3 mg/L criterion is not a drinking water standard but a human health

criterion that protects multiple uses of a stream, including consuming water from the stream, incidental ingestion and consumption through organisms. Lookenbill added there are other considerations; not all Pennsylvanians get their water through a regulated drinking water facility, there are seasonal and smaller facilities that receive drinking water that are not regulated and may receive untreated or under treated water, and regulated drinking water facilities' treatments can fail occasionally. Lookenbill noted all of those issues are protected by applying the human health criterion to water statewide.

St. Clair questioned if manganese should be treated as toxic considering pineapple juice contains manganese and asked if the Department considered pineapple juice to be toxic. Lookenbill responded that pineapple juice has fiber and other solids in it that allow the body to ingest it and then regulate manganese absorption. Lookenbill added that it is assumed that people consume about 2 liters of drinking water a day, but no one consumes 2 liters of pineapple juice a day for their entire life, especially not infants or children. Lookenbill noted that primarily bottle-fed infants will consume more than 2 liters of water each day because all they are consuming is formula, adding that infants are more susceptible to manganese effects.

St. Clair asked if the Department had any direct experience with treating manganese to a 0.3 mg/L level or lower through large volumes of water. Lookenbill explained that the Bureau of Clean Water does not, but the Mining Program and Abandoned Mining Program have had some experience and that DEP also consulted with the federal Office of Surface Mining Reclamation and Enforcement and continues to consult with them. St. Clair asked if mining operators will be able to meet the 0.3 mg/L standard on a regular basis. Lookenbill responded that the Department has the ability to exercise enforcement discretion to allow for compliance timelines or use consent orders and agreements, so facilities would not be expected to come into compliance immediately when the regulation is effective. Lookenbill added that there are different technologies that may be used that were evaluated by Penn State and discussed in a report included with the rulemaking documents.

Peter Blank provided comments on the adverse health impacts of exposure to elevated levels of manganese, noting that it is a nervous system toxin and has been specifically linked to negative impacts on fetal and childhood development, such as attention deficit hyperactivity disorder (ADHD), short term memory impairments, visual identification impairments, impaired performance on manual dexterity and repetitive testing and a reduction in IQ scores. Blank reiterated that the scientific literature and findings upon which the rulemaking is based are robust and consistent and concluded that the Department of Health supports the manganese criterion and point of compliance in the final rulemaking.

Heather Smiles commented that the Fish and Boat Commission supports the final rulemaking because it will maintain a point of compliance in all surface waters and it sets a criterion that will protect all water uses, including aquatic life uses from the known deleterious effects of elevated levels of manganese. Several scientific studies have documented the negative impacts that elevated manganese concentrations can have on aquatic life, including freshwater mussels, which are among the most imperiled groups of aquatic animal groups in the United States.

Representative Vitali made a motion to adopt the final rulemaking. Andrea Lowery seconded the motion.

Chairperson Ziadeh asked if there is any discussion on the motion. Glendon King requested to make two motions to table the regulation.

Glendon King made a motion to table the regulation until DEP could bring forward a regulation on manganese that complied with the Regulatory Review Act requirements of a single proposed regulation that could be promulgated as final regulation. Nick Troutman seconded the motion. There was no discussion on the motion. The motion failed by a majority vote of the Board (16-3). Nick Troutman, Glendon King and CAC member John St. Clair voted in support.

Glendon King made a second motion to table the regulation until it is in compliance with Act 40 of 2017's clear directive to promulgate a regulation that switches the point of compliance for manganese. Nick Troutman seconded the motion. There was no discussion on the motion. The motion failed by a majority vote of the Board (16-3). Nick Troutman, Glendon King and John St. Clair voted in support.

The Board then voted on the original motion to adopt the final rulemaking, which was approved by the Board (16-3). Nick Troutman, Glendon King, and John St. Clair voted in opposition.

OTHER BUSINESS:

Laura Griffin provided the following regulatory and petition updates.

On July 21, 2022, IRRC unanimously approved both the Coal Refuse Disposal Revisions final rulemaking, which was adopted at the Board's May 18, 2022 meeting, and the Control of VOC Emissions from Unconventional Oil and Natural Gas Sources final rulemaking, adopted at the Board's June 14, 2022 meeting.

The Department is evaluating the Conventional Oil and Gas Well Bonding and Unconventional Gas Well Bonding petitions, including effects that recently enacted legislation may have on the petitions.

Brian Chalfant added that the Department is working on the Conventional Oil and Natural Gas VOC rulemaking and plans to bring it to the Board shortly. Representative Vitali asked what meeting because time is running out. Chalfant responded as soon as possible to avoid the December 16, 2022 federal highway sanctions. Glendon King asked what happens if the conventional portion of the oil and gas rulemaking is not finalized in time and if EPA would give the Department some leeway because the unconventional regulations were complete. Chalfant responded that the federal regulations do not distinguish between conventional and unconventional oil and natural gas industries, so DEP must have both regulations finalized for EPA to consider the rulemaking submission complete.

NEXT MEETING:

The next meeting of the EQB is tentatively scheduled for Tuesday, September 13, 2022.

ADJOURN:

With no further business before the Board, Andrea Lowery moved to adjourn the meeting. Representative Vitali seconded the motion, which was unanimously approved by the Board.
The August 9, 2022, meeting of the Board was adjourned at 10:54 a.m.