

2/16/2018

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Environmental Quality Board
Rachel Carson State Office Building
16th Floor, 400 Market Street
Harrisburg, PA 17101-2301



RE: *Water Quality Standards Review - Pennsylvania Code, Title 25, Chapter 93*
Document Number: 17-1766

To Whom It May Concern:

Section 303(c)(1) of the federal Clean Water Act and 40 CFR 131.20 requires that states review water quality standards at least once every three years and update chemical and biological criteria as needed to protect the integrity of surface waters throughout the U.S. In response to this requirement, The Environmental Quality Board proposed revisions to Water Quality Standards contained in Pennsylvania Code, Title 25, Chapter 93. The proposed rulemaking was public noticed October 21, 2017 with an initial comment deadline of December 29, 2017. The comment period was later extended to February 16, 2018. On behalf of ArcelorMittal USA LLC (ArcelorMittal), EnviroScience Inc. respectfully submits the following comments regarding the proposed rulemaking to The Environmental Quality Board for consideration.

With 27 facilities in the United States including integrated steelmaking and cokemaking facilities, mini-mills, finishing operations, and mining operations, ArcelorMittal is one of the largest steelmakers in North America. With an employment presence in 14 states and the District of Columbia, ArcelorMittal employs more than 18,000 people in the United States.

ArcelorMittal operates four plants for steel manufacturing in Pennsylvania that discharge process wastewater as part of the steel making operations. Following is a brief description of each plant located throughout the state. These four facilities are impacted by the proposed revisions to water quality standards as included in the proposed rulemaking.

ArcelorMittal Plate LLC (ArcelorMittal Coatesville): The plant is located at 139 Modena Road in the City of Coatesville, Chester County. A large portion of the wastewater generated is recycled back to the manufacturing operations. However, a portion of the treated wastewater is discharged through two outfalls to the West Branch Brandywine Creek, and Sucker Run, under NPDES Permit No. PA0011568. The use designation for the West Branch Brandywine Creek is Warm Water Fishes (WWF) and Migratory Fishes (MF).

ArcelorMittal Plate LLC (ArcelorMittal Conshohocken): Approximately 30 miles from Coatesville, the Conshohocken plant is located at 900 Conshohocken Road in the City of Conshohocken, Montgomery County. The majority of the treated water is cycled back to the plant and reused in steelmaking operations. However, a portion of treated wastewater discharges via an outfall to the Schuylkill River under NPDES Permit PA0050326. The Schuylkill River is designated WWF and MF in the location of the discharge.



5070 Stow Road
Stow, OH 44224

ArcelorMittal Monessen LLC (Coke Plant): The facility is located at 345 Donner Avenue in the City of Monessen, Westmoreland County. Wastewater is discharged via one outfall to the Monongahela River under NPDES Permit No. PA0217034. The Monongahela River is designated for the WWF use.

ArcelorMittal Steelton LLC: This facility is located at 215 South Front Street in the City of Steelton, Dauphin County. A majority of the steelmaking process related wastewaters are recycled via the facility's Plant Water Supply Basin. Eventually wastewater is commingled with non-contact cooling water, boiler water, and storm water and is discharged to the Susquehanna River under NPDES Permit No. PA0008303. The Susquehanna River is designated with the WWF and MF uses in the vicinity of the discharge.

ArcelorMittal and EnviroScience completed their review of the rulemaking in accordance with the timelines established for public comment. The following comments contained in Attachment A are being provided by ArcelorMittal for consideration by The Environmental Quality Board prior to adopting the proposed revision for the water quality standards.

Should you have any questions or require additional information, do not hesitate to contact Tim VanSumeren or Julianne Kurdila of ArcelorMittal at (330) 659-7618 or (330) 659-7471.

Best regards,

John Kwolek, P.E.
Manager – Compliance Services

cc: Keith Nagel, Director - Environmental Affairs & Real Estate
Julianne Kurdila, Lead Specialist - Environmental Compliance & Policy
Tim VanSumeren, Engineer – Water Quality

Attachment A

Comments to the Board of Environmental Quality

Vol. 47, No. 42, Pennsylvania Bulletin 2017-10-21

Publication Date: 10/21/2017

Comment Deadline: 02/16/2018

Document Number: 17-1766

1. A decision regarding TDS or conductivity has been deferred by The Pennsylvania Department of Environmental Protection (The Department) at this time. In past rulemaking sessions, The Department considered the single ion approach to controlling TDS and conductivity by proposing a criterion for chloride beyond the currently protected areas in the proximity of Public Water Supplies. However, multiple attempts in the past to develop a chloride water quality criterion for the protection of aquatic life in freshwater systems were withdrawn due to the complex nature of aquatic systems and the chemical interactions that effect chloride toxicity in freshwater aquatic organisms.

As an alternative, The Department considered using specific conductivity to control ion toxicity in freshwater aquatic systems. The rulemaking indicated that the US EPA document, *Draft Field-Based Methods for Developing Aquatic Life Criteria for Specific Conductivity*, was being reviewed to determine its applicability to Pennsylvania streams. However, that document has not been finalized by US EPA, and The Department chose to delay consideration of the recommendations during this triennial review. As a result of the questions regarding ion toxicity and the US EPA findings, The Department also chose to defer a chloride criterion at this time but indicated that given the evidence of ion toxicity on freshwater aquatic organisms, they continue to review all available sources of research with a goal of developing appropriate criteria for the protection of aquatic life. They also indicated that their goal is to eventually develop criteria that are applicable to all freshwaters of the Commonwealth.

ArcelorMittal supports The Department's decision not to rely on draft conductivity guidance issued by US EPA. Unless and until such guidance is final, US EPA Headquarters' position is that states should not rely on it because US EPA is conducting further tests in response to comments¹. ArcelorMittal requests to be included in any subsequent review of technical

¹ Per discussion between AISI members and U.S. EPA Office of Water, Washington D.C. 10/30/17.

data specific to criteria associated with individual ions and conductivity in order to assist with any future review process.

2. In response to a letter from US EPA dated January 21, 2013, The Department proposes to add chronic and acute criteria for Total Ammonia Nitrogen (TAN) to the water quality criteria. The new criteria are based on the protection of sensitive freshwater mussels on a statewide basis. The justification given is the protection of sensitive mussel populations for both chronic and acute exposures, and the protection of salmonid species for acute exposures.

The *2015-2025 Pennsylvania Wildlife Action Plan*, published by the Pennsylvania Fish and Boat Commission, provides county record information for each of the endangered freshwater mussel species identified from Pennsylvania. Endangered mussels have been identified in 15 of Pennsylvania's 67 counties. ArcelorMittal does not operate in any of the 15 identified counties. Therefore, implementation of the TAN criteria to protect mussel species on a statewide basis is excessive since there are many watersheds where these standards will provide no net ecological benefit compared to the existing protections.

In the event The Department continues to consider the proposed TAN criteria, it is recommended that The Department create a "Sensitive Mussel" aquatic life use designation under which the proposed TAN criteria would apply, rather than apply the criteria statewide. Under this scenario, the Commonwealth could adopt guidance and standards for listing surface waters under this use, thereby providing protections where such actions are necessary to protect beneficial functions and to support sensitive mussel and salmonid populations.

If these revision to water quality criteria for TAN are adopted on a state-wide basis, permittees who are not located on sensitive streams are provided the opportunity to request site-specific criteria under 25 Pa Code Section 93.8d. These criteria are appropriate when site-specific biological or chemical conditions exist in the receiving waters which differ from conditions upon which the water quality criteria were based. Requests for site-specific criteria include all information collected during extensive scientific studies conducted by permittees requesting the site-specific criteria.

Upon receipt of any requests for site-specific criteria, The Department is required to review all data to verify that each request is appropriate. If the Department determines that site-specific criteria are appropriate, the Department is required to publish the site-specific criterion in the Pennsylvania Bulletin and take additional actions relating to public notice of permit applications and draft permits. In addition, The Department will be required to:

- i. Maintain publicly available lists of site-specific criteria,
- ii. Submit to the EPA's Regional Administrator for review and approval, the methodologies used for site-specific criteria development within 30 days of Department's final action, and
- iii. Prepare a recommendation to the Environmental Quality Board in the form of proposed rulemaking.

Sensitive mussel species have been documented in 15 counties of the Commonwealth, leaving 52 counties where sensitive species have not been identified. Multiple permittees in

those 52 counties could potentially request site specific criteria for TAN, placing a significant burden on The Department's resources. Developing the recommended "Sensitive Mussel" aquatic life use designation under which the proposed TAN criteria would apply to specific stream segments or watersheds where sensitive species are identified would eliminate the potentially significant burden for permittees and Commonwealth resources.

3. With respect to the proposed chronic TAN criterion, the Regulatory Analysis Form filed with the Independent Regulatory Review Commission claims positive impacts associated with reduced toxics in the Pennsylvania's waterways in general. ArcelorMittal agrees with the effort to improve the quality of life for those who recreate or otherwise depend on a healthy aquatic ecosystem for income. However, there are costs imposed on the regulated community related to increased treatment requirements associated with the proposed chronic TAN criterion in this rulemaking. To address the question of additional cost for treatment mandated by these regulations and attendant benefits, Section 19 of the Regulatory Analysis Form contains the following general statement:

"Specific estimates of costs and savings cannot be determined because each activity that will result in pollution to waters in this Commonwealth must be reviewed based on site-specific considerations. These site-specific considerations include, but are not limited to the size, flow volume, and the chemical, biological and physical properties of both the receiving water and the effluent discharge. These unique parameters result in site-specific requirements. National Pollutant Discharge Elimination System (NPDES) permits and other approvals will be required for discharges to waters of this Commonwealth using the water quality uses and criteria identified in the proposed regulations."

In addition, Section 23 of the Regulatory Analysis Form includes a table that is intended to provide an estimate of the fiscal savings and costs for the regulated community associated with implementation of the propose criteria. The table generally states that the costs and savings are, "Not Measurable".

These statements and other similar general statements made in the Regulatory Analysis Form seem to address the benefit of environmental regulations in general and do not provide information necessary for the public to evaluate the economic impact of this proposed rulemaking. The statements do not appear to be substantiated by any analysis of estimated or actual costs and impacts to the operation of regulated wastewater treatment facilities, nor do they provide a cost-benefit analysis regarding the implementation of the new standards. The ability of individual treatment plants to meet more stringent criteria will be a function of the existing capacity and engineering design of the facilities, and it cannot be assumed that all facilities will be able to meet the criteria without substantial upgrades to the plants. The economic costs on a case-by-case basis could be significant because of redesign and construction efforts needed to meet more stringent criteria.

It is recommended that The Department conduct a cost analysis to identify the actual costs for additional treatment. At a minimum, information such as the cost per pound of reductions in TAN should be developed and be made available to interested parties for review and comment prior to finalizing the proposed rule changes. In addition, interested parties should be consulted as part of the cost analysis to provide general and site-specific

information that should be considered prior to finalizing the proposed revisions to water quality standards.

4. It appears that the proposed bacteria criteria for *E. coli* are similar to those adopted by other states based upon federal recommendations. Though the criteria are backed by sound science with regards to human health, it has been difficult to consistently achieve the criteria in other states because of natural sources of *E. coli* in the environment. Implementation of these criteria has therefore resulted in expansion of the listing of impaired waters through the 303(d) processes and necessitated the development of Total Maximum Daily Loads for bacteria for affected waters with limited success. It is recommended that before the criteria for *E. coli* are adopted, The Department conduct a feasibility analysis of the criteria based on water quality studies conducted in stream segments known to have no sources of *E. coli* associated with human activities. The results of any feasibility analysis should be provided for public review and comments prior to finalizing the revisions to water quality standards for bacteria.

END OF COMMENTS