RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES

Response to Comments on the RI DEM Groundwater Quality Rules 250-RICR-150-05-3

December 14, 2018

The Rhode Island Department of Environmental Management (DEM) has received two comments on the proposed adoption of the Groundwater Quality Rules (250-RICR-05-3). The public comment period began with the public notice on November 13, 2018 and ended at 4:00 pm on December 13, 2018. The comments are available for public review at the RI Department of Environmental Management, 235 Promenade Street, Providence, RI 02908.

Comment #1:
Comment letter received on November 27, 2018 by email from Topher Hamblett, Director of Advocacy, Save the Bay (note: the letter is dated November 14, 2018). See attached letter.

Response:
In response to this comment, Section 3.17, both 3.17(A) and (B), will be retained in the Rules as they existed prior to public notice. Therefore, the text marked for deletion in the public notice version will remain, and the text marked as an addition will be removed.

Comment #2:
Comment letter received on December 13, 2018 from Stephen P. Risotto, Senior Director, Chemical Products and Technology Division of the American Chemistry Council. See attached letter.

Response:

The RI Department of Environmental Management and the RI Department of Health jointly determined that the EPA Lifetime Health Advisory for PFOA/PFOS is the best available concentration to use as a groundwater quality standard for the RI Groundwater Quality Rules, and it is protective of public health and the environment. This determination was made after review of the available scientific information and after reviewing standards established by other states, which included standards more stringent than the RI standard of 70 ppt for PFOA and PFOS only.

The State of RI believes that it is necessary to have a standard in place now in order to protect public health and the environment and in order to

consistently respond to instances of PFOA and PFOS contamination in RI's groundwater. Delaying adoption of a standard in anticipation of a final action by EPA at some uncertain future time as suggested by the commenter does not adequately meet groundwater quality management needs.

Should additional information become available in the future regarding the PFOA/PFOS standard based on scientifically supported information, the RI groundwater quality standard will be re-evaluated accordingly.

The commenter cites Section 3.14(A) and incorrectly states that the preventive action limit of one-half the groundwater quality standard would be used as the standard for groundwater remediation for PFOA and PFOS. As specified in Section 3.11(B)(2) of the Rules:

> "The preventive action limits shall be used in monitoring discharges to groundwater approved by the Director and monitoring groundwater that may be impacted by such discharges. Preventive action limits are not applicable in determining groundwater remediation objectives."

Furthermore, Section 3.14(A) states that "When a preventive action limit has not been met in the monitoring of discharges approved by the Director…", and it does not refer to preventive action limits as remediation objectives.

No changes will be made to the RI groundwater quality standard for PFOA/PFOS.

Comment #1, Save the Bay

Via email to ernie.panciera@dem.ri.gov

November 14, 2018

Ernie Panciera
Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, RI 02908

Re: RICR: 250-RICR-150-05-3, Amendment to Groundwater Quality Rules

Dear Mr. Panciera,

Save The Bay represents thousands of members and supporters committed to preserving, restoring, and protecting the ecological integrity and value of Narragansett Bay and coastal Rhode Island. An open and transparent government process is essential to environmental protection.

Save The Bay objects to the proposed elimination of section 3.17 B. contained in the existing Groundwater Quality Rules. Although the variance provision in the Groundwater Regulations has not been, and may rarely be, used, regulations must set forth a variance procedure that includes: (1) the requirements that must be met by the applicant in order to be granted a variance; (2) the clear and convincing standard of proof governing review of the request; and (3) a written decision including conditions required to protect the public health and the environment. In addition, it is imperative that the Director retain the authority to solicit public comment and hold a hearing on variance requests when there is "widespread public interest" or "the variance request raises major issues that could affect other facilities."

Save The Bay objects to the proposed elimination of every provision set forth in the existing section 3.17 B and requests that you retain section B, in its entirety, in the amended regulations.

Thank you for your consideration.

Topher Hamblett
Director of Advocacy

Comment #2, American Chemical Council

BY ELECTRONIC MAIL

December 13, 2018

Mr. Ernie Panciera
Department of Environmental Management
Office of Water Resources
235 Promenade Street
Providence, RI 02908

Re: Proposed Amendments – Groundwater Quality Rules (250-RICR-150-05-3)

Dear Mr. Panciera:

The Chemical Products and Technology Division of the American Chemistry Council (ACC/CPTD) submits the following comments on the Department of Environmental Management (DEM) proposal to recodify the Stormwater Manual into the Rhode Island Code of Regulations, including the establishment of GAA and GA groundwater quality standards for perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA), and total PFOS/PFOA. ACC/CPTD represents companies interested in ensuring that regulations related to these substances, like the DEM proposal, incorporate the best available science. ACC/CPTD is concerned about the proposal to apply the Lifetime Health Advisory (LHA) for PFOS and PFOA in drinking water developed by the U.S. Environmental Protection Agency (EPA) to groundwater quality standards for PFOS and PFOA.

EPA currently is developing cleanup levels for PFOS and PFOA that will apply to federal Superfund sites in Rhode Island and throughout the nation. The establishment of state levels has the potential to create confusion and conflict about the applicable cleanup targets for these substances. Applying the LHA for PFOS and PFOA to ground water levels is not supported by the available science, moreover.

DEM Should Review EPA Cleanup Levels Before Proceeding

At the PFAS National Leadership Summit held in May 2018, EPA announced that it would provide groundwater cleanup recommendations for PFOS and PFOA at contaminated sites by the end of the year. Those recommendations currently are under review by the other federal

americanchemistry.com® 700 Second St., NE | Washington, DC | 20002 | (202) 249-7000

agencies[1] and are expected to be released within the next few weeks. The recommendations will identify cleanup levels for the two substances that are protective of human health and the environment. In the absence of a federal maximum contaminant level (MCL) or other federal standard, the pending recommendations will serve as the applicable or relevant and appropriate requirement (ARAR) for federally-administered cleanups under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Creating separate state levels for these two substances would create confusion about applicable cleanup targets among affected parties and levels of protection among the public.

Applying EPA's Drinking Water Advisory Level to Groundwater is Inappropriate and Unnecessary

The EPA LHAs for PFOS and PFOA were developed as health-based guidelines for assessing potential exposure in drinking water. They are necessarily based on a number of conservative assumptions regarding potential health effects and differences in susceptibility across species, levels of water consumption, exposures among sensitive populations, and exposure to sources other than drinking water.[2] Consequently, the LHAs proposed by the EPA are not supported by a strong scientific basis and indicate a level of conservatism that is inappropriate for groundwater quality standards. Furthermore, cleaning up groundwater to the levels proposed by DEM based on the proposed LHA values is likewise not justified or practical, nor is it likely to provide a meaningful difference in protecting public health.

Although many PFAS can be removed from water, removal requires that the water be brought into contact with granular activated carbon (GAC) or adsorbent resins. ACC-CPTD is not aware of any effective means for treating PFAS contamination in-situ. DEM's proposal to require cleanup of groundwater to the LHA would require extensive placement of "pump and treat" systems whereby the groundwater is brought to the surface, pumped through GAC beds, and subsequently discharged. Such systems are cumbersome and disruptive and generally must operate for extended periods of time to achieve target levels. This approach requires a long-term commitment by all stakeholders including residents near the treatment facility.

The DEM Proposal Effectively Sets the Standard at One-Half the EPA Health Advisory

Under § 3.14(A) facility owners and operators are responsible for taking action when sampling of GAA and GA groundwater supplies indicates that the preventive action limit –

---

[1] Draft interim recommendations to address groundwater contamination with PFOS and PFOA are under Executive Order 12866 review at the Office of Information and Regulatory Affairs of the White House's Office of Management and Budget. https://www.reginfo.gov/public/

[2] EPA. Drinking water health advisory for perfluorooctanoic acid (PFOA). EPA 822-R-16-005 (May 2016); Drinking water health advisory for perfluorooctane sulfonate (PFOS). EPA-822-R-16-004 (May 2016).

defined as 50 percent of the standard set pursuant to § 3.11(a)(2) - is exceeded. Actions required under § 3.14(A) include groundwater remediation, where technically and economically feasible.

The proposal to establish groundwater quality standards for PFOS and PFOA equivalent to the LHA of 70 parts per trillion, therefore, would create an expectation for the remediation of groundwater sources designated GAA and GA to 35 ppt. Setting such an arbitrary limit for these substances, without a robust evaluation of the underlying justification, is inappropriate and unscientific. Before moving ahead with groundwater standards for PFOS and PFOA, or for any substance for which federal maximum contaminant levels do not exist, DEM must develop sufficient understanding of the limitations of the current health effects information to determine the likelihood the groundwater quality standards would make a meaningful difference in public health. In addition, DEM will want to consider the current limitations in the technologies available for groundwater cleanup and the economic impact of a clean-up program with no evidence of impacting public health.

Given the challenges of reducing groundwater levels of PFOS and PFOA, ACC-CPTD urges the Department to abandon the current proposal and base its efforts on progress the EPA is making in understanding the health implications of PFOS and PFOA and their efforts to establish groundwater cleanup levels for PFOS and PFOA.

Please feel free to contact me at 202-249-6727 or srisotto@americanchemistry.com if you have questions on our position of if we can be of assistance as you move forward to resolve this important public health issue. .

Sincerely,

Steve Risotto

Stephen P. Risotto
Senior Director

americanchemistry.com® 700 Second St., NE | Washington, DC 20002 | (202) 249.7000