DuPont Corporate Remediation Group
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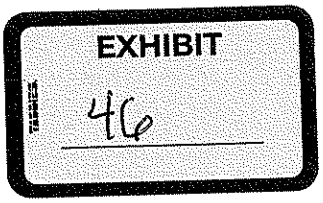
March 17, 2010

Ms. Traci Iott
Bureau of Water Protection & Land Reuse
Planning & Standards Division
Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127



Re: DuPont Comments on Proposed Water Quality Standards

Dear Ms. Iott:

DuPont is submitting these comments in response to revisions to the Connecticut Water Quality Standards ("WQS") proposed by the Connecticut Department of Environmental Protection ("DEP") on December 22, 2009. DuPont has significant "administrative" concerns about the process and schedule used to establish the WQS, and some specific "technical" concerns about the proposed WQS methodology and basis for selection of criteria and their use.

Administrative Concerns

The revisions were proposed pursuant to Section 303 of the federal Clean Water Act and Conn. Gen. Stat. § 22a-426. The proposed revisions constitute a major amendment to the state WQS, which were last amended in 2002. They include: the addition of more than 100 compounds for which DEP has proposed aquatic life and human health based criteria; unprecedented authorization for the agency to set "benchmarks" without any regulatory process or oversight; and many other changes, including new temperature requirements for discharges.

The Water Quality Standards Should Be Adopted as a Regulation under the UAPA:

The sweeping revisions contemplated by the DEP's proposal will significantly impact the rights of a wide range of parties subject to the agency's jurisdiction by imposing standards which the regulated community must meet, particularly applicants for surface water discharge permits and renewals and parties conducting clean-ups under the Connecticut Remediation Standard Regulations.

As such the WQS constitute a "regulation" under the Uniform Administrative Procedures Act ("UAPA"), Conn. Gen. Stat. § 22a-166 *et seq.* The UAPA defines a "regulation" as "each agency statement of general applicability without regard to its designation, that implements, interprets, or prescribes law or policy, or describes the organization, procedure, or practice requirements of any agency." Conn. Gen. Stat. §4-166(13), and the agency is required to adhere to the requirements of the UAPA in adopting them. Moreover, Conn. Gen. Stat. § 22a-424, which provide the powers and duties of the Commissioner under the State Clean Water Act (Chapter 446k) requires the Commissioner "To adopt regulations in accordance with the provisions of Chapter 54 (UAPA) to implement this chapter and to comply with the federal Water Pollution Control Act and federal Safe Drinking Water Act."

However, contrary to these statutory requirements, the DEP has indicated that it will not adopt the WQS revisions as a regulation in accordance with the UAPA. Therefore, there will be no compliance with the UAPA provisions requiring a fiscal note on the impacts of the WQS on state and local government, no analysis of the impact of the WQS on small business, and no oversight by the Legislative Regulations Review Committee. As the adoption of the WQS does not meet the requirements of a "contested case" under the UAPA, there is likewise no appeal to court from the agency's action. A regulatory package of the sweep of the proposed WQS should be adopted as a regulation under the UAPA to provide the minimum safeguards against arbitrary agency action embodied in the UAPA.

Technical Concerns

By not following the established process for rule-making, DuPont is concerned that there will be specific technical issues that don't get the necessary stakeholder discussion and agreement prior to the adoption of new requirements.

Although this is not a complete list of potential technical concerns, here are some specific issues of items that should be addressed.

Surface Water Hardness:

The numerical water quality criteria in the proposed WQS are overly conservative since they ignore the significant effect of hardness on metal toxicity. It has long been shown that surface water hardness has a significant mitigating effect on the biological toxicity of dissolved metals including cadmium, chromium, copper, lead, nickel, silver and zinc. USEPA addresses this effect by including criteria for these metals adjusted based on the hardness of the ambient surface water. Increasing hardness has the effect of decreasing toxicity for these metals. By establishing a statewide generic value for hardness, consideration of site specific hardness, which is critical to understanding actual metal toxicity in the environment, is not considered.

Ground Water Pathway:

Section 22a-133k-3(b)(2) of the current (1996) Remediation Standard Regulations (RSR's) in relevant part states:

" If a ground-water plume (A) discharges to a wetland or an intermittent stream, ...each substance therein shall be remediated to a concentration equal to or less than the applicable aquatic life criteria contained in Appendix D to the most recent Water Quality Standards , or equal to or less than an alternative water quality criterion adopted by the Commissioner in accordance with section 22a-426 of the General statutes and paragraph 12b of the Water Quality Standards effective May 15, 1992."

Remediation of groundwater to surface water quality criteria is overly conservative and technically flawed in that the criteria are typically developed using aquatic receptors or biota. The point of compliance should be the same as the point of exposure, i.e., the surface water body. In this way, attenuation in the ground and dilution in the surface water will be accounted for in the final surface water concentration.

In addition, the language in the existing RSR's ties in the latest WQS by rule. This could potentially create new criteria for numerous (100+) compounds in an arbitrary manner with no opportunity for comment.

Technical Feasibility:

Proposed criteria for some of chemicals listed are orders of magnitude below laboratory method detection limits which can be achieved using current laboratory technology. For example, in the proposed WQS, the chronic freshwater criterion for toxaphene is 0.002 ug/l. Specifying a regulatory criterion below the achievable analytical limits provides no mechanism for assessment or compliance monitoring.

Comparison to EPA Guidelines:

There are numerous compounds where the proposed WQS are significantly lower than long-established EPA criteria; many of these levels are not supported by rigorous laboratory or field validation for relevant receptors. The lack of validation, in combination with the lack of protective measures afforded by the UAPA, establishes the potential for unilateral imposition of inappropriate criteria with no due recourse by the regulated community.

We look forward to working with the CT DEP in the future to make the WQS a beneficial document that serves the state, the citizens, and the regulated community with distinction.

Sincerely,

Thomas E. Stilley, PE
Project Director
DuPont Corporate Remediation Group