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## THE CUBICAL

Year-End 2025

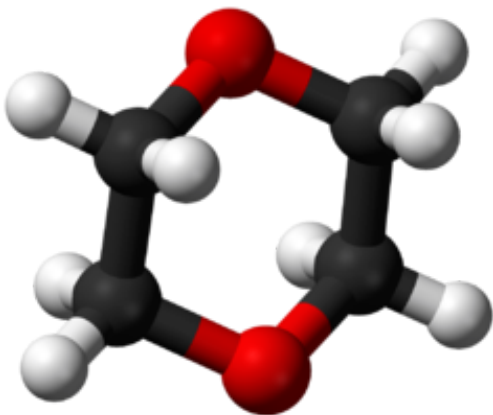


***Happy Holidays from  
Daniel J. Brown, L.L.C.!!***

I would like to wish everyone a safe and happy holiday season with families and loved ones. And of course, all the best wishes for a safe and prosperous 2026!!

**Dan Brown**

## 1,4-Dioxane Permit Limits for Municipal Wastewater Treatment Plants: The Controversy in N.C. Continues



In October, a local community college in Asheboro, North Carolina was the focal point of a dispute regarding the City of Asheboro's (the "City's") wastewater treatment plant. There, EPA Region 4 conducted a public hearing regarding the Agency's objection to the lack of a numerical effluent limitation for 1,4-dioxane in the NPDES permit for the City's WWTP. No actions were taken or announcements made immediately following the hearing. However, this hearing was just the latest round in an ongoing saga over the last several years, going

back to when the North Carolina Department of Environmental Quality ("DEQ") issued a renewal of the City's NPDES permit. More developments are certain to follow in the coming months.

The origin of this dispute can be traced as far back as August 21, 2023, when DEQ issued a renewed NPDES permit for the City that included a numeric effluent limitation for 1,4-dioxane. 1,4-dioxane is considered as a likely human carcinogen by EPA, and as possibly carcinogenic by the International Agency for Research on Cancer ("IARC"). Historically, 1,4-dioxane had been used as a stabilizer for the chlorinated organic solvent, 1,1,1-trichloroethane ("TCA"). 1,4-dioxane is highly mobile and is considered to be a risk to human health and the environment at very low concentrations.

The 1,4-dioxane limitation established by DEQ was derived by the application of a *translator procedure* to translate a narrative water quality standard into a numeric water quality criterion. The City and several other municipalities challenged DEQ's authority to establish such a limit. In September 2024, an administrative law judge with the State's Office of Administrative Hearings ("OAH") struck the limit, concluding that the Department had not followed required rulemaking procedures. In response, DEQ issued a new NPDES permit that did not contain a numeric limitation for 1,4-dioxane.

EPA Region 4 objected to the new NPDES permit with no enforceable 1,4-dioxane limit. In a Specific Objection issued on January 3, 2025, EPA stated that NPDES permits must contain effluent limits as stringent as necessary to meet applicable water quality standards. According to the Agency, a NPDES permit for the City's WWTP with no 1,4-dioxane limit does not meet that obligation. Following the issuance of the Specific Objection, the City requested a public hearing.

Now that the public hearing has been conducted, it seems likely that EPA Region 4's next step will be to start a process that may result in the Agency assuming authority for the issuance of the City's NPDES permit. This may ultimately lead to the issuance of a permit with numeric limits for 1,4-dioxane. In the meantime, other developments continue to take place. DEQ has appealed the OAH's ruling to Wake County Superior Court. The Department has also recently reported elevated levels of 1,4-dioxane in the City's WWTP effluent. Finally, several other North Carolina municipalities are considering challenges to proposed or currently existing 1,4-dioxane numeric limits for their respective wastewater treatment operations.

In terms of the broader impacts, the trajectory and ultimate outcomes of this dispute will likely continue to resonate in North Carolina and beyond. Conventional methods for secondary treatment of municipal wastewater are not effective in treating 1,4-dioxane. Municipal wastewater treatment plants facing 1,4-dioxane limits will likely need to make investments in capital upgrades in order to comply with such limits. Annual operating costs are likely to increase significantly as well. Given the potential impact on utility budgets, municipalities are likely to investigate and identify potential industrial user sources, and ultimately seek to hold them responsible for these increased costs.

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## What Is EPA's Real Concern: 1,4-Dioxane? Or Protecting the Integrity of Narrative Water Quality Criteria?

In the eyes of the public and the press, the on-going dispute over the terms of the City of Asheboro's NPDES permit is about the toxicity of 1,4-dioxane, as well as the costs associated with treating this substance to achieve compliance limits. EPA Region 4 is concerned about these issues as well. However, a close inspection of EPA's Specific Objection letter reveals that the Agency is also concerned about ensuring the efficacy of narrative water criteria as a means of achieving compliance with water quality standards for the nation's lakes, rivers, and streams.

Perhaps the real concern here is protecting the ability of EPA and state regulatory agencies to "translate" narrative water quality criteria into numeric limits. A recent U.S. Supreme Court case highlights this concern. In *San Francisco v. EPA* (decided March 4, 2025), the Court held that the Clean Water Act does not authorize "end-result" provisions in a NPDES permit. In the Court's view, "[d]etermining what steps a permittee must take to ensure that water quality standards are met is ... EPA's responsibility...."

Whatever other deficiencies there may have been in the substance and process surrounding the issuance of the City of Asheboro's permit, the use of a *translator procedure* seems to address the Supreme Court's concern regarding "end-result" provisions. With that in mind, EPA, DEQ, and other states that rely heavily on narrative water quality standards for toxicity have a



## When Is a Carcinogen a Carcinogen?

One of the more interesting issues of statutory and regulatory interpretation to come out of the City of Asheboro's initial challenge to the initial renewed NPDES permit for its wastewater treatment plant is the question of what constitutes a "carcinogen." This was actually the threshold question that was decided by North Carolina's Office of Administrative Hearings ("OAH"). The reason for this is that DEQ relied on the provisions of its narrative water quality standards applying to carcinogenic toxic substances when translating this narrative standard to a numeric criterion for the City's NPDES permit.

According to the decision, these provisions only apply to *actual* carcinogens. In the OAH's view, they do not apply to *qualified* carcinogens. Designations such as *likely carcinogenic* are merely qualified designations. Thus, substances carrying such designations are not covered by the State's narrative water quality standard for carcinogenic toxic substances. According to the OAH, DEQ erred when it used this narrative water quality standard to develop a numeric standard for a substance that had been designated



vested interest in ensuring the continued utility of such procedures.

by EPA as a *likely* human carcinogen, and by IARC as *possibly* carcinogenic to humans.

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## ***An Article of Faith No Longer?*** **EPA Proposes to Add Article Exemption to TSCA PFAS Reporting Rule**

In the 2021 Year-End edition of *The Cubical*, I noted what appeared at the time to be a concerted regulatory effort to reduce the scope and extent of so-called "article exemptions" in a variety of federal notification and reporting programs. Broadly speaking, an "article" is a manufactured item: (i) that is formed to a specific shape or design; (ii) that has an end use function which is dependent on its shape or design; and (iii) whose chemical composition is not impacted by its end use. As one example of this apparent pull-back, I pointed to provisions in the federal defense authorization package for Fiscal Year 2022 that would not allow facilities to take advantage of the Toxic Release Inventory ("TRI") program's exemptions for articles when filing TRI reports for reportable PFAS.

Well, quite a lot has changed in four years! In a notice proposing changes to its TSCA PFAS Reporting Rule (referred to herein as the "Rulemaking Notice"), EPA is proposing to add an exemption from the PFAS reporting requirements for importers of articles containing PFAS. EPA's TSCA PFAS Reporting Rule requires manufacturers and importers of PFAS to submit reports that contain information on quantities manufactured or imported, descriptions of byproducts resulting from manufacture, the number of workers exposed, and the duration of such exposure. Under the current rule, importers of articles containing PFAS are subject to these reporting requirements.

In the Rulemaking Notice, EPA claims that it has previously exceeded the scope of its legislative authority when it promulgated a rule covering importers of articles containing PFAS. In the Agency's current view, the authorizing legislation was intended to target "manufacturers of the PFAS themselves." EPA also noted that manufacturers are unlikely to have much "reasonably ascertainable information" concerning PFAS-containing articles that were imported during the reporting period. Finally, EPA observed that given the scope of data required to be reported, it will "nevertheless receive information on the incorporation of PFAS in articles."

The stated rationales for the inclusion of an article exemption to the TSCA PFAS Reporting Rule are specific to the stated needs and interpretation of the authorizing legislation. Absent from the Rulemaking Notice were any broader, more general policy statements in favor of exempting articles from notification and reporting requirements. Nonetheless, when considered in conjunction with policy statements and general direction under current Administration, EPA seems to be tapping the brakes on the move to eliminate article exemptions from notification and reporting requirements

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