**IMPORTANT QUOTES FROM THE UNITED STATES COURT OF APPEALS FOR THE FIRST CIRCUIT**

**UPPER BLACKSTONE WATER POLLUTION ABATEMENT DISTRICT V. EPA CASE 11-1474 08/03/2012**

(For full decision see: <https://caselaw.findlaw.com/us-1st-circuit/1607991.html>)

The District's responsibility for serious pollution problems in the important waterways of two states is clear, and its challenge to the 2008 permit has no merit. As the District has recognized, cost considerations may not be considered by the EPA in the setting of permit limits to assure compliance with state water quality standards.

We trust that the District, as well as the EPA, will now act with expedition to address these problems. The District and CLF's petitions are denied. The stay granted by this court on April 29, 2011, is lifted. No costs are awarded.

The Supreme Court has held that the CWA grants the EPA authority to require in NPDES permits conditions which ensure compliance with the water quality requirements of downstream states.

Because both Massachusetts and Rhode Island employ narrative water quality criteria for the relevant pollutants, the EPA translated these into numeric limits under its procedures set out in 40 C.F.R. § 122.44(d)(1)(vi).

The formulation of the 2008 permit's effluent limitations for the three chemical elements at issue *(nitrogen, phosphorus and aluminum)* required substantial scientific and technical expertise. Our review of the EPA's decision is deferential. See 33 U.S.C. § 1369(b)(1)(F); City of Pittsfield, Mass. v. EPA, 614 F.3d 7, 10 (1st Cir. 2010). Under the Administrative Procedure Act, we ask whether the EPA's actions were “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). We will not set aside those actions unless the agency "has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). We will "uphold a decision of less than ideal clarity" where it finds support in the record and has a rational basis.

A reviewing court must remember that [where the agency] is making predictions, within its area of special expertise, at the frontiers of science . . . . as opposed to simple findings of fact, a reviewing court must generally be at its most deferential.

We give an extreme degree of deference to the agency when it is evaluating scientific data within its technical expertise.

We also defer to the EPA's reasonable interpretation of the CWA. Fed. Express Corp. v. Holowecki, 552 U.S. 389, 397 (2008). This deference increases where the EPA interprets its own regulations, Adams, 38 F.3d at 49; generally speaking, the agency's interpretation will be "controlling unless 'plainly erroneous or inconsistent with the regulation.

As to the District's computer model, neither the CWA nor EPA regulations permit the EPA to delay issuance of a new permit indefinitely until better science can be developed, even where

there is some uncertainty in the existing data. The five-year term limit requires the EPA or state permitting authority to re-ensure compliance with the Act whenever a permit expires and is renewed.

The EPA's decision entailed not only an evaluation of the sufficiency of the available scientific record, but also a risk analysis of the consequences of waiting. Nitrogen-based cultural

eutrophication becomes more difficult to address the longer it is left unchecked. Nitrogen loadings accumulate and persist in water systems in a way that can exacerbate future water quality problems. The EPA found that both the severity of the existing water quality problems, and the potential for aggravated future problems, "counsel[ed] in favor of imposing a nitrogen limit . . . based on information currently available." This type of risk assessment is within the EPA's policymaking discretion, and its judgment here is entitled to respect.

In almost every case, more data can be collected, models further calibrated to match real world conditions; the hope or anticipation that better science will materialize is always present, to some degree, in the context of science-based agency decisionmaking. Congress was aware of this when it nonetheless set a firm deadline for issuing new permits. As in many science-based policymaking contexts, under the CWA the EPA is required to exercise its judgment even in the face of some scientific uncertainty. The Supreme Court has recognized this dimension of EPA decisionmaking in the context of the Clean Air Act. In Massachusetts v. EPA, 549 U.S. 497 (2007), the Court held that the EPA cannot "avoid its statutory obligation by noting the [presence of] uncertainty." Id. at 534. If "scientific uncertainty is so profound that it precludes EPA from making a reasoned judgment . . . EPA must say so. That EPA would prefer not

to regulate greenhouse gases because of some residual uncertainty . . . is irrelevant.

The statutory question is whether sufficient information exists to make an endangerment finding." Id.; see also Miami-Dade County v. EPA, 529 F.3d 1049, 1065 (11th Cir. 2008) (holding that the "EPA is compelled to exercise its judgment in the face of scientific uncertainty unless that uncertainty is so profound that it precludes any reasoned judgment"); Ethyl Corp., 541 F.2d at 28 ("[R]ecognizing . . . the developing nature of [the field] . . . . [t]he [EPA] Administrator may apply his expertise to draw conclusions from suspected, but not completely substantiated,

relationships between facts, from trends among facts, from theoretical projections from imperfect data, from probative preliminary data not yet certifiable as 'fact,' and the like.").

The EPA did not act irrationally here by issuing the permit in the face of some scientific uncertainty.

Where the agency follows the proper procedures and acts with a reasonable basis, both its choice of scientific data and interpretation and application of that data to real world conditions are entitled to deference. Sur Contra La Contaminacion, 202 F.3d at 448; P.R. Aqueduct & Sewer Auth., 35 F.3d at 604; see also Coal. for Responsible Regulation, 2012 WL 2381955, at \*7.

Although the District singles out the EPA's reliance on the MERL model, the EPA used many sources of information in formulating the nitrogen limits, including both Massachusetts and Rhode Island reports on nitrogen loadings in the Bay, water quality studies evaluating nitrogen levels and response variables in the Bay, and national nitrogen guidance. One significant source of information the EPA examined was Rhode Island's own in-state limits for nitrogen discharge into the relevant waters. As noted above, Rhode Island has imposed nitrogen limits equivalent to or stricter than the District's 5.0 mg/L limit on similarly situated sewage treatment facilities discharging into the three rivers and the Bay.

The District's argument that the MERL model should have been excluded from consideration entirely is without merit. The EPA is not limited to models which perfectly replicate real world

conditions. A model does not have to precisely predict the actual or an average future to increase understanding of a particular process or the role that different elements play in that process. The District's objection that the MERL model does not predict the level of nitrogen control needed misstates and misunderstands the different roles that scientific models may play in informing science-based decisions. Here, the EPA states, and the record reflects, that the MERL model demonstrated the relationship between nitrogen loading, dissolved oxygen, and chlorophyll *a* production for a range of loading scenarios in a water environment similar to

the Bay's.

The EPA also followed the proper procedures for ensuring that the model received scrutiny not only from the permittee, but from the scientific community and the public. The EPA highlighted

the model's potential shortcomings in the draft permit documents it published for public comment. Numerous stakeholders, organizations, and individuals submitted support for and criticism of the model. In its detailed and extensive responses to these comments, the EPA carefully reviewed and responded to each criticism raised. The EAB further reviewed the EPA Region's analysis of the model, and found no reason to fault that analysis.

A]dmission of uncertainties where they exist," "public exposure of the assumptions and data incorporated into the analysis," "the acceptance and consideration of public comment," and, ultimately, a decision that reflects the rule of reason, are the structural features of reasoned, publicly accountable science-based agency decisionmaking. Sierra Club, 657 F.2d at 334 & n.130; see also Nat'l Mar. Safety Ass'n v. Occupational Safety & Health Admin., 649 F.3d 743, 752 (D.C. Cir. 2011), cert. denied, 134 S. Ct. 1960 (2012). The EPA incorporated these structural safeguards into its decisionmaking process. The EPA's determination, based on its analysis of the evidence before it as a whole, that a nitrogen limit of 5.0 mg/L was necessary to achieve Rhode Island's water quality standards was not a "hunch[] or wild guess[]" but a rational exercise of judgment.

The District's argument seems to go to the precision of the permit's nitrogen limit. But where a complex administrative statute, like those the EPA is charged with administering, requires an agency to set a numerical standard, courts will not overturn the agency's choice of a precise figure where it falls within a "zone of reasonableness.

CLF's argument that the EPA should have interpreted RIDEM's Report to require a 3.0 mg/L limit amounts to an attack on the EPA's interpretation and application of the scientific data before it to real world conditions. We give the EPA substantial deference in this area.

The EPA did not act irrationally by considering its national and regional phosphorus guidance criteria in addition to site-specific data. The guidance documents helped inform the EPA's

background understanding of phosphorus-driven eutrophication and recommended "a range of ambient phosphorus concentrations that [would be] sufficiently low to prevent cultural eutrophication" in river systems similar to the Blackstone. See 40 C.F.R. § 122.44(d)(1)(vi).

EPA regulations require permitting authorities to include in NPDES permits conditions which "control all pollutants or pollutant parameters . . . [that] are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1)(i); see also 54 Fed. Reg. 23,868, 23,873 (June 2, 1989). We thus reject the notion that in order to strengthen the District's discharge limits, the EPA must show that the new limits, in and of themselves, will cure any water quality problems.