



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF WATER

MEMORANDUM

SUBJECT: Transmittal of Framework for Best Professional Judgment for Cooling Water Intake Structures at Hydroelectric Facilities

FROM: Andrew Sawyers, PhD., Director
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TO: Water Division Directors
Regions 1 – 10

The purpose of this memorandum is to transmit to EPA Regional Water Division Directors a framework (attached) that EPA recently used to evaluate whether, based on the Agency's best professional judgment (BPJ), additional measures may be necessary at hydroelectric generating facilities to minimize impingement and entrainment of fish and other aquatic organisms at cooling water intake structures (CWIS).

Section 316(b) of the Clean Water Act (CWA) requires EPA to issue regulations on the design and operation of CWIS, in order to minimize adverse impacts from impingement and entrainment of fish and other aquatic organisms. In 2014, EPA promulgated a regulation to implement Section 316(b) which establishes Best Technology Available (BTA) requirements for existing CWIS that meet certain operational thresholds (known as the existing facility rule).¹ EPA regulations at 40 CFR 125.90(b) further provide that a CWIS that is not subject to provisions of the existing facility rule or another regulation implementing CWA Section 316(b) must meet BAT requirements that are established on a case-by-case, BPJ basis.

¹ The existing facilities rule states that the substantive provisions of the rule apply to any facility that is 1) a point source 2) with a cooling water intake structure with a design intake flow greater than 2 MGD, 3) using 25 percent of the withdrawn water for cooling. 40 C.F.R. § 125.91(a).

The Agency has determined that, in light of the text, structure, history and purpose of the 2014 existing facilities rule, the rule is ambiguous as to the applicability of the substantive requirements to CWIS at hydroelectric facilities. The Agency has also determined that EPA did not intend that the 2014 rule's substantive provisions would apply to CWIS at hydroelectric facilities and instead, pursuant to 40 C.F.R. §125.90(b), CWIS at hydroelectric facilities are subject to BPJ.

In a recent permitting action, EPA developed a framework to consider various technologies currently installed at hydroelectric generating facilities to establish case-by-case BPJ conditions. EPA presented the framework in the Fact Sheets for certain draft permits² and solicited comment on the framework. As part of the public comment period on the draft permits, EPA received public comments on the framework from 11 entities,³ considered those comments, and made adjustments to improve clarity and the utility of the framework. Enclosed with this memorandum is a revised framework that may be useful for permitting authorities to employ when considering whether additional requirements may be necessary, based on BPJ, to minimize entrainment and impingement mortality from CWIS at hydroelectric facilities.

EPA notes that its existing regulations, including 40 C.F.R. §125.90(b), reflect the Agency's current interpretation of CWA Section 316(b) as requiring BPJ conditions for any CWIS that is located at a facility subject to the NPDES permit program. However, this has not always been EPA's interpretation of CWA Section 316(b). In the early years following the enactment of CWA Section 316(b), the Agency interpreted the section as only applying to facilities that are subject to an effluent limitations guideline (ELG) or a new source performance standard (NSPS). When EPA first proposed a rule to implement CWA Section 316(b), the applicability provision was drafted as follows:

“The provisions of this part are applicable to cooling water intake structures for point sources for which *effluent limitations guidelines are established pursuant to section 301 or standards of performance are established pursuant to section 306 of the Act.*” 38 Fed. Reg. 34410, 34412 (December 13, 1973) (emphasis supplied).

When finalized, that language was revised to omit the word “guidelines;” however, there are no statements in the preamble to the final rule explaining or suggesting that this change was meant to be substantive. 41 Fed. Reg. 17387, 17389 (April 26, 1976). Additionally, an early permitting decision made under CWA Section 316(b) could be read to suggest a similar interpretation of the statute. *In re Central Hudson Gas and Electric Corp., EPA Decision of the General Counsel, NPDES Permits* (July 29, 1977), addressed whether effluent limitations under Section 301 and effluent limitations under Section 316(a) for thermal discharges must be first established before intake structure conditions under CWA Section 316(b) may be considered or developed. EPA's decision document stated that “[p]ermit conditions may be imposed under Section 316(b) as long as there is a standard promulgated pursuant to

² See Fact Sheet for Federal Hydroelectric Projects in the Lower Columbia River (Bonneville Project – WA0026778, The Dalles Lock and Dam – WA0026701, John Day Project – WA0026832, McNary Lock and Dam – WA0026824) and Fact Sheet for Lower Snake River Federal Hydroelectric Projects in the Lower Snake River (Ice Harbor Lock and Dam – WA0026816, Lower Monumental Lock and Dam – WA0026808, Little Goose Lock and Dam – WA0026786, and Lower Granite Lock and Dam – WA0026794)

³ See <https://www.epa.gov/sites/production/files/2020-06/documents/r10-npdes-usace-lower-columbia-snake-river-hydroelectric-facilities-public-comments-2020.pdf>

Section 301 or Section 306 which could be applied to the point source. . . .” *Id.* EPA’s decision document further states that “the reference in Section 316(b) to Sections 301 and 306 clearly indicates that the application of restrictions under 316(b) is predicated only upon the promulgation of *generally applicable national effluent limitations and guidelines*, or, under Section 301(b)(1)(C), limitations necessary to meet water quality standards.” *Id.* (emphasis added).

Since the early 2000’s, however, EPA has taken the broader position that 316(b) applies to any NPDES facility with a CWIS. *See e.g.*, 65 Fed. Reg. 49,060 (Aug. 10, 2000) (“This proposed rule would apply to new facilities that use cooling water intake structures to withdraw water from waters of the U.S. and that have or require a National Pollutant Discharge Elimination System (NPDES) permit issued under section 402 of the CWA.”); 66 Fed. Reg. 65,258 (the final rule “applies to a new facility that has or is required to have a National Pollutant Discharge Elimination System (NPDES) permit.”) (Dec. 18, 2001). Although this broader interpretation is currently reflected in EPA’s regulations, EPA would not be precluded from revising its regulations at a later date should policy or other considerations warrant. *See e.g.*, *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984); *Nat’l Cable & Telecomm. Ass’n v. Brand X Internet Serv.*, 545 U.S. 967(2005).

Attachment

Framework for Considering Existing Hydroelectric Facility Technologies in Establishing Case-by-Case, BPJ §316(b) NPDES Permit Conditions