



Water: Cooling Water Intakes (316b)

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Cooling Water Intake Structures—CWA §316(b)

Section 316(b) of the Clean Water Act requires that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. [Additional basic information about EPA's cooling intake regulations.](#)

You will need Adobe Reader to view some of the files on this page. See [EPA's PDF page](#) to learn more.

Modified Settlement Agreement for Proposed Regulations

EPA has secured an additional year to finalize standards for cooling water intake structures under section 316(b) of the Clean Water Act, under a [modified settlement agreement \(PDF\)](#) (3 pp, 111K). The Agency is working to finalize the standards by June 27, 2013.

EPA issued two Notices of Data Availability (NODA) in mid-June that described flexibilities EPA is considering as part of the impingement mortality limitations and that described the preliminary results of surveys of households' willingness to pay for incremental reductions in fish mortality. This extension will allow EPA to complete analysis of data, options and public comments on the NODAs prior to finalizing the rule.

Notices of Data Availability for Proposed Regulations

EPA issued two Notices of Data Availability (NODA) in mid-June that described flexibilities EPA is considering as part of the impingement mortality limitations and that described the preliminary results of surveys of households' willingness to pay for incremental reductions in fish mortality.

Notice of Data Availability Related to Impingement Mortality Control Requirements

Through the NODA published on June 11, 2012 EPA presented new data and information it received and collected since the proposed rule was published related to the performance of impingement mortality control technologies. This information was posted in the Federal Register to present a summary of significant data EPA has received or collected since publishing our April 20, 2011 proposed rule, a discussion of how EPA is considering incorporating these data in revised analyses supporting the final rule, and a discussion of possible revisions to the final rule that EPA is considering that were suggested by the comments.

Since proposal EPA has received and collected new data related to the performance of impingement mortality control technologies. EPA obtained more than 80 studies from comments on the proposed rule, and in follow-up to comments, that provided additional biological data. This data includes information related to how EPA might approach the definition of impingement mortality and compliance alternatives.

The comment period on this notice of data availability related to impingement mortality control requirements for proposed regulations to establish requirements for cooling water intake structures closed on July 11, 2012.

- [Fact sheet \(PDF\)](#) (2 pp, 39K) (May 2012)
- [Federal Register Notice | Print Version \(PDF\)](#) (12 pp, 271K) (June 11, 2012)

Notice of Data Availability Related to the EPA Stated Preference Survey

Through the NODA published on June 12, 2012 EPA presented additional new data and information it received and collected since the proposed rule was published related to the results of EPA's stated preference survey.

As part of the proposed rule, EPA indicated it was in the process of developing a stated preference survey to estimate total willingness to pay (WTP) for improvements to fishery resources affected by in-scope 316(b) facilities. This notice, together with supporting material available at the link below, presents the new data and preliminary analysis currently available from the stated preference survey results. Upon completion of the analysis and independent peer review, EPA will post the updated results on this page. EPA will then consider how the new benefits analysis informs the final rule.

The comment period on this notice of data availability related to EPA's stated preference survey for proposed regulations to establish requirements for cooling water intake structures closed on July 12, 2012.

- [Fact sheet \(PDF\)](#) (2 pp, 151K) (June 2012)
- [Federal Register Notice | Print Version \(PDF\)](#) (5 pp, 213K) (June 12, 2012)
- Supporting Material
 - [Survey Supporting Document \(PDF\)](#) (47 pp, 268K)
 - [Survey analysis memo to the 316b rulemaking record \(PDF\)](#) (58 pp, 1.2MB)
 - [Survey Data](#) (Excel, 1.2MB)

Proposed Rule for Existing Facilities

The comment period closed on August 18, 2011 instead of July 19, 2011. The revised date was announced in the Federal Register on July 20, 2011.

[Federal Register Notice | Print Version \(PDF\)](#) (2 pp, 188K) (July 20, 2011)

EPA proposed, and requested comment on, requirements under section 316(b) of the Clean Water Act for all existing power generating facilities and existing manufacturing and industrial facilities.

- [Fact sheet \(PDF\)](#) (2 pp, 59K)
- [Federal Register Notice | Print Version \(PDF\)](#) (115 pp, 1.40MB) (April 20, 2011)
- [Answers to Common Questions About the Proposed Rule \(PDF\)](#) (4 pp, 90K)
- [News Release](#) (March 28, 2011)
- Supporting Documents
 - [Environmental and Economic Benefits Analysis for Proposed Section 316\(b\) Existing Facilities Rule \(PDF\)](#) (303 pp, 1.80MB) (EPA 821-R-11-002)
 - [Economic and Benefits Analysis for Proposed Section 316\(b\) Existing Facilities Rule \(PDF\)](#) (515 pp, 8.82MB) (EPA 821-R-11-003)
 - [Technical Development Document for the Proposed Section 316\(b\) Phase II Existing Facilities Rule \(PDF\)](#) (428 pp, 10.3MB) (EPA 821-R-11-001)

Settlement Agreement

In November 2010, EPA signed a [Settlement Agreement with Riverkeeper \(PDF\)](#) (25 pp, 185K) regarding rulemaking dates for EPA to set technology standards for cooling water intake structures for existing facilities under Clean Water Act Section 316(b). EPA agreed to propose standards by March 14, 2011, and after considering public comments, to take final action by July 27, 2012.

On March 11, 2011, the parties agreed to an [amendment \(PDF\)](#) (3 pp, 730K) to the settlement agreement to extend the date for the proposed rule. The revised date is March 28, 2011.

Willingness to Pay Survey for Benefits Assessment

OMB approved the Information Collection Request (ICR) for a national stated preference survey that could inform the benefits analysis for the upcoming final regulation of cooling water intake structures at facilities such as power plants. The OMB Control Number is 2040-0283. [Additional information on OMB's Notice of Action and the ICR Supporting Statement.](#)

Suspension of Phase II Rule

EPA is suspending the Cooling Water Intake Structure Regulations for existing large power plants. This suspension is in response to the 2nd Circuit Court of Appeals decision in *Riverkeeper, Inc., v. EPA*.

[Federal Register Notice](#) (July 09, 2007) | [Implementation Memo \(PDF\)](#) (1 pp, 72K, March 20, 2007)

There are three rulemaking phases:

- [Phase I rule](#), promulgated in 2001, covers new facilities
- [Phase II rule](#), promulgated in 2004, covers large existing electric generating plants
- [Phase III rule](#), promulgated in 2006, covers certain existing facilities and new offshore and coastal oil and gas extraction facilities
- [Information Collection Request for Cooling Water Intake Structures New Facility Final Rule \(Renewal\)](#) (June 25, 2008)

Related Clean Water Act Program: Sec. 402, [National Pollutant Discharge Elimination System \(NPDES\)](#)

Note: EPA no longer updates this information, but it may be useful as a reference or resource.

- [Information Collection Request for Cooling Water Intake Structures New Facility Final Rule \(Renewal\)](#) (March 28, 2008)
- [April 2006 status report to the court](#)
- [January 2006 status report to the court](#)
- [October 2005 status report to the court](#)
- [Proceedings Report: Symposium on Cooling Water Intake Technologies to Protect Aquatic Organisms](#) (May 2003)

[Quarterly Status Reports to Court](#)**[Questionnaires](#)**

Public Meetings

<http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/index.cfm>

Related Documents

Last updated on Thursday, September 27, 2012

**EPA****United States
Environmental Protection
Agency**

Office of Water

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Notice of Data Availability Related to Impingement Mortality Control Requirements for Proposed Regulations for Cooling Water Intake Structures

Summary

On April 20, 2011, EPA published a rule proposing standards for cooling water intake structures at all existing power generating facilities and existing manufacturing and industrial facilities as part of implementing section 316(b) of the Clean Water Act. EPA has signed for publication in the *Federal Register* this Notice of Data Availability (NODA) to present a summary of significant data EPA has received or collected since proposal, a discussion of how EPA is considering incorporating these data in revised analyses supporting the final rule, and a discussion of possible revisions to the final rule that EPA is considering that were suggested by the comments. EPA solicits public comment on the information presented in this notice and the record supporting this notice for 30 days upon publication in the *Federal Register*.

Purpose of This Notice

This NODA makes available for public review new data and information EPA obtained since rule proposal.

EPA obtained more than 80 studies from comments and in follow-up to comments that provide additional biological data. Some of the information may help to address EPA's intent to greatly reduce the damage to ecosystems while accommodating site-specific circumstances and providing cost-effective options for compliance. Some of these suggestions relate to the impingement mortality standard, and are discussed in this notice along with accompanying new data.

The NODA presents a discussion of how EPA is considering incorporating these data in revised

analyses supporting the final rule, and a discussion of alternative approaches to the impingement mortality requirements that EPA is considering for the final rule.

Background

Section 316(b) of the Clean Water Act requires that National Pollutant Discharge Elimination System (NPDES) permits for facilities with cooling water intake structures ensure that the location, design, construction, and capacity of the structures reflect the best technology available to minimize harmful impacts on the environment. The withdrawal of cooling water by facilities removes billions of aquatic organisms from waters of the United States each year, including fish, fish larvae and eggs, crustaceans, shellfish, sea turtles, marine mammals, and other aquatic life. Most impacts are to early life stages of fish and shellfish through impingement and entrainment.

Under a consent decree with environmental organizations, EPA divided the section 316(b) rulemaking into three phases. All new facilities except offshore oil and gas exploration facilities were addressed in Phase I in December 2001; all new offshore oil and gas exploration facilities were later addressed in June 2006 as part of Phase III. Existing large electric-generating facilities were addressed in Phase II in February 2004 and existing small electric-generating and all manufacturing facilities were addressed in Phase III in June 2006. However, Phase II and the existing facility portion of Phase III were remanded to EPA for reconsideration as a result of legal proceedings. The April 2011 proposal combines Phases II and III into one rule, and provides a holistic approach to protecting aquatic life impacted by cooling water intakes at existing electric generating and manufacturing

facilities.

Any facility not covered by these national rules will continue to be subject to section 316(b) requirements set by the EPA, state, or territorial NPDES Permitting Director on a case-by-case, best professional judgment basis.

The proposed rule published in April 2011 covers roughly 1,260 existing facilities that each withdraws at least 2 million gallons per day of cooling water. EPA estimates that approximately 590 of these facilities are manufacturers, and the other 670 are power plants.

For More Information

Please contact Paul Shriner (shriner.paul@epa.gov or 202-566-1076) or Lisa Biddle (biddle.lisa@epa.gov or 202-566-0350). You can also learn more about this rule by visiting EPA's website at: <http://water.epa.gov/lawsregs/lawsguidance/cwa/316b/>.
