

# ARE YOU COMPLYING WITH THE 316(B) EXISTING FACILITIES RULE?

CWA 316(b) cooling water intake structure requirements

## Using Surface Water for Non-Contact Cooling?



### About AECOM

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## Are YOU Ready?

Under the Clean Water Act Section 316(b), the United States Environmental Protection Agency (EPA) has set regulations to reduce the number of fish and shellfish injured or killed by Cooling Water Intake Structures (CWIS) at utilities and industries.

### The final regulation became effective October 14<sup>th</sup>, 2014

The rule applies to existing facilities that use one or more CWIS to withdraw water from waters of the US. The rule establishes requirements for facilities that are designed to withdraw more than 2 million gallons per day (MGD) and use at least 25% of the withdrawn water exclusively for cooling purposes. These facilities will need to demonstrate compliance with a Best Technology Available (BTA) option for limiting impingement mortality of fish and shellfish on the CWIS.

Facilities that withdraw an actual intake flow (AIF) of 125 MGD or more will also be required to conduct studies to help the regulatory authority evaluate the relative efficacy and cost of alternative CWIS. EPA has determined that it may take a facility as long as 39 months to plan, collect, and compile the data and studies required by the 316(b) rule to be submitted with a National Pollutant Discharge Elimination System (NPDES) permit application.

### EPA estimates the annual cost of compliance as \$297.3 million for the 1,065 existing facilities subject to the rule

The rule requires a number of reports and studies, and you must select and implement one of seven technologies that are considered BTA for reducing impingement mortality and potentially apply a site-specific BTA measure for entrainment.

### AECOM has the experience and proven track record at over 100 facilities throughout the US and Puerto Rico to minimize your compliance costs. AECOM can assist your facility by:

- Developing a strategy and cost effective plan to comply
- Conducting a data gap analysis and developing a schedule and budget
- Reviewing the status of existing reports for applicability to the rule requirements, saving time and money
- Negotiating with regulators implementing 316(b) for your facility to advocate the most economical path forward
- Providing streamlined aquatic surveys and impingement and entrainment studies
- Preparing reports per 40 CFR §122.21(r) using available data, minimizing expensive sampling programs
- Addressing potential issues associated with Threatened and Endangered Species
- Selecting the most cost-effective technology option
- Providing design and construction services as needed

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# IS YOUR FACILITY AFFECTED?

## FACILITY CHARACTERISTICS AND APPLICABLE REQUIREMENTS

### Existing facility w/DIF > 2 MGD and AIF > 125 MGD

Impingement mortality standard and site-specific entrainment requirements. Additional §122.21(r)(2-13) study and reporting requirements.

### Existing facility w/DIF > 2 MGD but AIF not > 125 MGD

Impingement mortality standard and site-specific entrainment requirements. Reports §122.21(r)(2-6 and 8). Additional reports for entrainment at Director discretion.

### New unit at existing facility where facility has DIF > 2 MGD

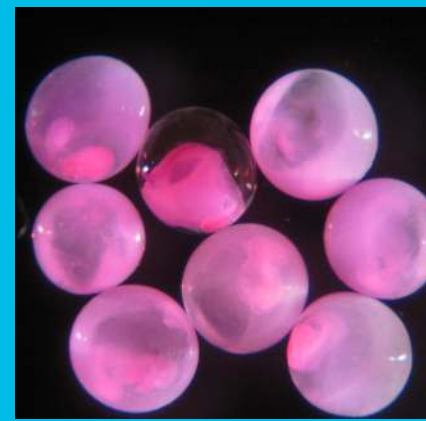
Impingement mortality standards and entrainment standard consistent with new unit.

### Other existing facility w/DIF ≤ 2 MGD or that has a cooling water intake that withdraws < 25% of the water for cooling purposes

Case by case using best professional judgment

## §122.21(r) REPORTS AND STUDIES

- Source Water Physical Data
- Cooling Water Intake Structure Data
- Source Water Baseline Biological Characterization Data
- Cooling Water System Data
- Chosen Method of Compliance with Impingement Mortality Standard
- Entrainment Performance Studies
- Operational Status
- Entrainment Characterization Study
- Comprehensive Technical Feasibility and Cost Evaluation Study
- Benefits Valuation Study
- Non-Water Quality Environmental and Other Impacts Study
- Peer Review



## Proposed Compliance Schedule for Facilities with >125 MGD Actual Intake Flow

<b>6 MONTHS</b>	Develop data collection plans for §122.21(r) (4),(6),and (9) if necessary
<b>1 YEAR</b>	Perform studies needed for §122.21(r) (4), and 2-year entrainment mortality characterization studies required under §122.21(r)(9)
<b>3 YEARS</b>	Analyze entrainment data collected and develop reports for §122.21(r)(9-12)
<b>4 YEARS</b>	Peer review §122.21(r)(10-12) reports and submit §122.21(r)(2-12) reports USFWS and NMFS review of permit application
<b>NEXT PERMIT</b>	Install impingement and entrainment technology as soon as practical according to the schedule of requirements set by the Permit Writer Perform verification monitoring and optimization

**MORE INFORMATION**

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