

and compare documents addressing similar technologies.

Each document is reviewed according to five areas of data quality where possible: (1) Applicability and utility, (2) soundness, (3) clarity and completeness, (4) uncertainty and variability, and (5) evaluation and review. Because the literature in question comes from many different sources and was developed under widely varying standards, EPA was not able to evaluate all of these criteria for all documents contained in the database.

To date, EPA has collected 148 documents for inclusion in the database. EPA did not exclude any document that addressed technology performance in relation to impingement and entrainment, regardless of the overall quality of the data. Sample questions are included in Exhibit 1 below. The proposed technology database is available in the record (See the document "Technology Efficacy Database" in the docket).

EXHIBIT 1.—QUALITY ASSURANCE SAMPLE QUESTIONS

QA Criteria	Sample Questions
Applicability and Utility.	<ul style="list-style-type: none"> Does the study address impingement and/or entrainment reduction? Does the study evaluate a technology (or technologies) in situ or against performance data from another source? Does the study include biological data?
Soundness	<ul style="list-style-type: none"> Does the study detail the CWIS configuration at the time of the study? Are SOPs for sampling and testing included? Is some measure of before and after biological data included? Are O&M procedures described for the test period?
Clarity and Completeness.	<ul style="list-style-type: none"> Is the sampling method clearly described? Is a complete biological data set included? Are results clearly and completely documented?
Uncertainty and Variability.	<ul style="list-style-type: none"> Does the study identify potential uncertainties or mitigating factors such as those due to environmental conditions?

EXHIBIT 1.—QUALITY ASSURANCE SAMPLE QUESTIONS—Continued

QA Criteria	Sample Questions
Evaluation and Review.	<ul style="list-style-type: none"> What is the source of the document? Is the document a primary study? Has the document been peer reviewed? Was the purpose of the study to evaluate the performance of a specific technology?

EPA is seeking comment on the applicability, quality, and quantity of the information and analyses in this database upon which EPA is relying. More specifically, EPA requests comment on whether these data are of sufficient quantity and quality to support the determination that the proposed performance standards are best technology available and that the existing facilities can meet these standards by implementing design and construction technologies either singly or in conjunction with other design and construction technologies (including operational and restoration measures). In addition, EPA requests comment on limitations of the data and identification of other relevant information available to be included in this database. Based on a preliminary review of the available data, the Agency continues to believe that an 80–95% reduction in impingement mortality and a 60–90% reduction in entrainment are achievable.

B. Streamlined Technology Option for Certain Locations

EPA received a number of comments expressing concern that the proposed Comprehensive Demonstration Study requirements at § 125.95(b) would impose a significant burden on permit applicants. As proposed, the Comprehensive Demonstration Study would have as many as seven different components: (1) A Proposal for Information Collection; (2) Source Waterbody Flow Information; (3) an Impingement Mortality and Entrainment Characterization Study; (4) a Design and Construction Technology Plan; (5) Information to Support any Proposed Restoration Measures; (6) Information to Support Site-Specific Determination of Best Technology Available for Minimizing Adverse Environmental Impact; and (7) a Verification Monitoring Plan.²⁰ The proposed

²⁰ Information to support the use of restoration measures and/or the use of site-specific determinations would be required to be collected and submitted only by permit applicants that choose to use restoration measures or demonstrate

Comprehensive Demonstration Study requirement would allow a permit applicant to either identify and compile available existing data, or to perform new site-specific studies to characterize the waterbody within the influence of the cooling water intake structure and the efficacy of proposed technologies.

Some commenters suggested that EPA provide an additional, more streamlined compliance option under which a facility could implement certain specified technologies that are deemed highly protective in exchange for not having to perform, or greatly reducing the scope of, the proposed Comprehensive Demonstration Study required at § 125.95(b). In response to these comments EPA is considering, and invites the public to comment on two variations of a streamlined compliance option that would reduce the information collection burden imposed on permit applicants.

Under the first variation, EPA would evaluate the effectiveness of specific technologies using the impingement mortality and entrainment performance standards specified in the proposed rule as assessment criteria. Specifically, EPA would require that the demonstrated efficacy of the control technology would at least reduce impingement mortality by 80 to 95 percent for fish and shellfish. If it was also to be used by facilities with an additional requirement to reduce entrainment by 60 to 90 percent for all life stages of fish and shellfish, then EPA would ensure that the technology would also satisfy this requirement. Evaluation of the level of impingement mortality or entrainment reduction would be based on review and analysis of available data, studies, and literature. The Agency also would assess the conditions where such technologies are effective (e.g., location, whether a technology reduces impingement or entrainment or both, flow, velocity, species, life stage, etc.). If, based on such an assessment, the Agency identifies technologies that are sufficiently protective and for which applicability conditions can be defined, EPA would promulgate regulations (either as part of the 316(b) Phase II rule or at some later date) that allow for their use as a means of complying with Phase II section 316(b) requirements.

EPA is in the process of assessing this option and has not completed a comprehensive review of control technology efficacy data for the purpose of identifying and delineating technologies that might qualify under this option. However, the efficacy data

that a site-specific determination of best technology available is appropriate for their facility.