development of its Transportation Conformity SIP and Regional Haze Implementation Plan. EPA has made the preliminary determination that Tennessee's SIP and practices adequately demonstrate consultation with, and participation by, affected local entities related to the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS when necessary.

V. Proposed Action

As described above, with the exception of sub-element 110(a)(2)(E)(ii) respecting CAA section 128(a)(1) requirements, EPA is proposing to determine that Tennessee's infrastructure submissions, provided to EPA on December 14, 2007 and October 19, 2009, addressed the required infrastructure elements for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS. EPA is proposing to approve in part and conditionally approve in part, Tennessee's SIP submission consistent with section 110(k)(3) of the CAA.

As described above, with the exception of sub-element 110(a)(2)(E)(ii) respecting CAA section 128(a)(1) requirements, and contingent upon final action by EPA to approve TDEC's July 29, 2011, SIP submission regarding the State's PSD/NSR regulations, TDEC will have addressed the requisite elements of the CAA 110(a)(1) and (2) SIP requirements pursuant to EPA's October 2, 2007 and September 25, 2009, guidance to ensure that the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS are implemented, enforced, and maintained in Tennessee. With respect to 110(a)(2)(E)(ii) (referencing section 128 of the CAA), EPA is proposing to conditionally approve Tennessee's infrastructure SIP.

Based on a March 28, 2012, commitment that TDEC will adopt specific enforceable measures into its SIP and submit these revisions to EPA within one year of EPA's final rulemaking to address the applicable portions of section 128, EPA is today proposing to conditionally approve Tennessee's infrastructure submission for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS for sub-element 110(a)(2)(E)(ii) respecting the requirements of CAA section 128(a)(1). EPA is also proposing to approve Tennessee's infrastructure submissions for the 1997 annual and 2006 24-hour $PM_{2.5}$ NAAQS because its December 14, 2007, and October 19, 2009, submissions are consistent with section 110 of the CAA. This proposed approval with respect to element 110(a)(2)(C) is contingent upon EPA first taking final action to approve TDEC's July 29, 2011, SIP submission regarding the State's PSD/NSR regulations,

VI. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. See 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this proposed action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this proposed action:

- Is not a ''significant regulatory action'' subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this proposed rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

List of Subjects in 40 CFR Part 52

Air pollution control, Environmental protection, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Volatile organic compounds.

Authority: 42 U.S.C. 7401 *et seq.*

Dated: May 31, 2012.

A. Stanley Meiburg,

Acting Regional Administrator, Region 4.

[FR Doc. 2012–14096 Filed 6–8–12; 8:45 am]

BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 122, 123, 124, and 125

[EPA–HQ–OW–2008–0667, FRL–9681–4]

RIN 2040–AE95

National Pollutant Discharge Elimination System—Proposed Regulations to Establish Requirements for Cooling Water Intake Structures at Existing Facilities; Notice of Data Availability Related to Impingement Mortality Control Requirements

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of Data Availability.

SUMMARY: On April 20, 2011, EPA published proposed 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 (CWA). As a result of that notice, EPA received extensive comments on its proposal. These comments included a substantial amount of new information accompanied by reports, studies and other documents often supplemented with the substantiating data. In some cases, the materials may not have included the underlying data supporting the documents' conclusions. Consequently, in many circumstances, EPA contacted the commenters to obtain the raw data underlying the documents for EPA's use in further assessing its proposal. This notice presents a summary of the significant new information and data EPA has received since proposal and a discussion of possible revisions to the final rule that EPA is considering that were suggested by the data and comments. EPA solicits public comment on the data and possible revisions presented in this

notice and the record supporting this notice.

DATES: Comments must be received on or before July 11, 2012.

ADDRESSES: Submit your comments, identified by Docket No. EPA–HQ–OW–2008–0667 by one of the following methods:

- *http:www.regulations.gov:* Follow the on-line instructions for submitting comments.
- *Email: OW–Docket@epa.gov*, Attention Docket ID No. EPA–HQ–OW–2008–0667.
- *Mail:* Water Docket, U.S. Environmental Protection Agency, Mail Code: 4203M, 1200 Pennsylvania Ave. NW., Washington, DC 20460. Attention Docket ID No. EPA–HQ–OW–2008–0667. Please include a total of 3 copies. In addition, please mail a copy of your comments on information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th St. NW., Washington, DC 20503.
- *Hand Delivery:* Water Docket, EPA Docket Center, EPA West Building Room 3334, 1301 Constitution Ave. NW., Washington, DC, Attention Docket ID No. EPA–HQ–OW–2008–0667. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information by calling 202–566–2426.

Instructions: Direct your comments to Docket No. EPA–HQ–OW–2008–0667. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at *http://www.regulations.gov*, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Information that you consider to be CBI or otherwise protected should not be submitted through *www.regulations.gov* or email. The *www.regulations.gov* Web site is an ''anonymous access'' system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through *http://www.regulations.gov* your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD–ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the *http://www.regulations.gov* index. Although listed in the index, some information is not publicly available, *e.g.,* CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in *http://www.regulations.gov* or in hard copy at the Water Docket in the EPA Docket Center, EPA/DC, EPA West, Room 3334, 1301 Constitution Ave. NW., Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is 202–566–1744, and the telephone number for the Water Docket is 202–566–2426.

FOR FURTHER INFORMATION CONTACT: For additional technical information, contact Paul Shriner at 202–566–1076; email: *shriner.paul@epa.gov*. For additional economic information, contact Erik Helm at 202–566–1049; email: *helm.erik@epa.gov* or Wendy Hoffman at 202–564–8794; email: *hoffman.wendy@epa.gov*. For additional biological information, contact Tom Born at 202–566–1001; email: *born.tom@epa.gov*.

SUPPLEMENTARY INFORMATION:

Supporting Documentation

A. Docket

EPA has established an official public docket for this action under Docket ID No. EPA–HQ–OW–2008–0667. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. Although a part of the official docket, the public docket does not include information claimed as Confidential Business Information (CBI) or other information for which the disclosure is restricted by statute. For information on how to access materials in the docket, refer to the preceding **ADDRESSES** section. To view docket materials, please call ahead to schedule an appointment. Every user is entitled to copy 266 pages per day before incurring a charge. The Docket may charge 15 cents for each page over the 266-page limit plus an administrative fee of $25.00.

B. Electronic Access

You may access this **Federal Register** document and the docket electronically, as well as submit public comments, through the Web site *http://www.regulations.gov* by searching for Docket ID No. EPA–HQ–OW–2008–0667. For additional information about the public docket, visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm*.

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I. Purpose of This Notice

On April 20, 2011, EPA published proposed standards for cooling water intake structures at all existing power generating facilities and existing manufacturing and industrial facilities as part of EPA's implementation of its responsibilities under section 316(b) of the Clean Water Act (CWA) (76 FR 22174). EPA received voluminous comments and data submissions during the 90-day public comment period. After many commenters requested additional time to review the proposal, on July 20, 2011, EPA extended the comment period by an additional 30 days (76 FR 43230).

Along with the comments on the proposal, EPA also received more than 50 documents containing new impingement and entrainment data. In addition, after the comment period ended, EPA followed up with those commenters whose comments referred to studies or summarized data in their comments, but had not submitted the underlying studies or raw data referenced in their comments. As a result, these commenters also provided over 30 additional documents containing new impingement and entrainment data. EPA is reviewing each of these roughly 80 documents for possible use in developing the final

impingement mortality limitations. This notice makes these data available and discusses the relevance of these data to the analyses conducted by EPA. EPA solicits comment both on the information presented in this notice and the record supporting this notice.

EPA requested comment on all aspects of the proposed existing facility rule, including specific solicitation of comments and data on 28 key issues (76 FR 22174, Section XI). EPA received more than 1,100 comment letters, several of which provided specific recommendations for changes to the proposed regulatory language. Some of the suggested revisions, if adopted, 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.

EPA notes that all data and options and issues discussed in its proposal are still under consideration for the final rule. This notice is intended to apprise the public of the new information, make this information available for public review and provide an opportunity to comment on the new information that the Agency will consider in making its decisions for the final rule. However, EPA notes that the Agency is not reopening the proposed rule for comment through this notice.

A. Summary of Proposed Rule for Existing Facilities

The proposed rule would establish requirements under section 316(b) of the Clean Water Act (CWA) for all existing power generating facilities and existing manufacturing and industrial facilities that withdraw more than 2 million gallons per day (MGD) of water from waters of the U.S. and use at least 25 percent of the water they withdraw exclusively for cooling purposes. The proposed national requirements, which would be implemented through National Pollutant Discharge Elimination System (NPDES) permits, would establish national requirements applicable to the location, design, construction, and capacity of cooling water intake structures at these facilities by setting requirements that reflect the best technology available (BTA) for minimizing adverse environmental impact. The proposed rule responds to the remands of the Phase II existing facility rule and the existing facilities portion of the Phase III rule from the U.S. Courts of Appeals for the Second Circuit and Fifth Circuit. In addition, EPA responded to the decision in *Riverkeeper, Inc.* v. *EPA,* 358 F.3d 174 (2d cir. 2004) and proposed to remove from the Phase I new facility rule the restoration-based compliance alternative and the associated monitoring and demonstration requirements.

The proposed rule provided significant flexibility in complying with the proposed technology standards for impingement and entrainment. For the proposal, EPA concluded that the best technology available for reducing impingement mortality was modified travelling screens. Based on this BTA technology, EPA proposed standards for impingement that would require existing facilities to reduce impingement mortality. The owner or operator of the facility would be able to choose one of two options to comply with the impingement standard. Under the first option, a numeric fish impingement mortality limitation, the owner or operator would have to sample to measure fish mortality directly to show it will meet the specified mortality performance standards. The owner or operator could use any appropriate technology to meet the standard. Under the second option, a velocity limitation, a facility would have to demonstrate to the permitting authority that its maximum intake velocity will not exceed 0.5 feet per second under specified design conditions. Operation of its intake system in compliance with these specified design conditions would become part of the facility's permit requirements. EPA estimated that more than half of the facilities that could be impacted by the proposed rule already employ readily available technologies that are likely to put them into compliance with the proposed standard.

For entrainment, EPA proposed a site-specific determination to be made by the Director based on local concerns and on the unique circumstances of each facility. The proposed rule would establish requirements for the owner or operator of a facility with actual intake flows in excess of 125 MGD to conduct comprehensive studies, and for all facilities to develop certain information as part of the permit application. Under the procedures proposed to be established in the proposal, the permit authority would determine the appropriate technology to reduce entrainment mortality, if any, to be implemented at each facility after considering site-specific factors.

II. New Information Received Concerning Proposed Impingement Mortality (IM) Requirements

EPA received a substantial number of comments on how the final rule should address impingement mortality (IM). EPA based its proposed national impingement mortality limitations on the performance of modified traveling screens. And, as noted above, as an alternative EPA proposed that a facility could demonstrate that either the design intake velocity or the actual intake velocity at its operation was less than 0.5 feet per second. Most of the commenters, including members of the U.S. Congress, state and local elected officials, and industry stakeholders, requested additional flexibility in complying with the IM requirements.

While the proposal would not specifically require the use of modified traveling screens with a fish handling and return system to meet the IM limits, some commenters interpreted the proposed rule as requiring this. EPA's proposed IM limits are expressed as a monthly average and an annual average. A facility could meet the limitation through any technology it chose. In EPA's view, this approach is a more flexible one than establishing a design standard (i.e., requiring a specific technology) because it would allow facilities to choose a compliance technology that best meets the individual facility requirements dictated by site and other conditions. Further, such an approach allows for innovation in meeting the national impingement mortality limitations. EPA recognizes, however, that some regulated entities may find a technology-based compliance option, rather than a performance based approach, more attractive. Such an approach, particularly the specification of pre-approved technologies, may offer higher regulatory certainty, easier demonstration of compliance, and may offer a less expensive alternative due to reduced monitoring requirements associated with pre-approved technologies. Some commenters viewed the proposed IM standard as overly stringent and requested that EPA establish alternative IM requirements, including site-specific IM requirements similar to those proposed for entrainment. Other commenters provided data pertaining to the performance of technologies, including modified traveling screens used as the basis for the IM limitations.

EPA reviewed all the performance data submitted. EPA is considering these performance data in its evaluation of BTA, including likely revisions to the IM annual and monthly numeric limits, different approaches that may better streamline compliance, and additional options that would better facilitate a demonstration of performance that is equivalent to the proposed BTA. EPA

also received several comments that proposed alternative regulatory approaches or provided specific alternative regulatory language. EPA is also reviewing these comments and considering the alternative regulatory approaches suggested. The data received and corresponding issues are described in more detail in the following sections.

A. New Information Received

As discussed in section I, EPA received more than 80 additional documents containing impingement and entrainment data. In some cases, the only data available was the facility name plus raw sampling data for a number of different species of fish and/or shellfish. Other documents focus on source water characterization data. EPA identified more than 40 distinct sets of additional impingement sampling and performance data from these documents. EPA is reviewing the data in each of these documents for potential inclusion in EPA's evaluation of an IM limitation. In light of these data and accompanying comments, EPA is also reviewing the criteria it adopted for including a study in the limit calculations. EPA's proposed criteria were described in Chapter 11 of the Technical Development Document (DCN 10–0004, EPA–HQ–OW–2008–0667–1282).

In addition to the new impingement and entrainment data, some stakeholders suggested alternative regulatory frameworks for impingement mortality. Under the proposed rule, a facility would be permitted to adopt any technology it chooses so long as it will achieve the required impingement limitation. Thus, a facility could demonstrate the reductions in impingement mortality by either (1) increasing the survival of those fish and shellfish that are impinged, or (2) by reducing the fish and shellfish impingement rates in the first place. EPA had concluded, based on the information it reviewed, that the design standards pertaining to intake velocity would achieve the impingement mortality limitations, and proposed such design criteria as having met the impingement mortality limitation. Therefore, compliance with intake velocity limitation would achieve full compliance with the numeric impingement mortality limitations and no additional control technology would be required.

Several industry stakeholders stated that, despite EPA's best intentions, the proposed rule applied a one-size-fits-all approach for impingement mortality. While all of the suggested changes to the proposal seek to provide additional flexibility through a variety of approaches, most of the comments had several elements in common:

- Commenters suggested defining modified traveling screens as a pre-approved technology or otherwise streamlining the NPDES process for facilities using the candidate technology upon which BTA is based. Thus, EPA would designate certain technologies or certain conditions as complying with the impingement requirement;
- Providing a mechanism to identify other technologies that perform comparably to modified traveling screens;
- Modifying the proposal so that facilities that have already reduced the rate of impingement may obtain credit towards the IM limit;
- Developing a more tailored approach to protecting shellfish;
- Creating alternatives for facilities with very low impingement levels or mortality rates; and
- Providing additional clarity on species of concern as it pertains to demonstrating compliance with the IM limitations.

In addition, as noted above, EPA also received a number of comments suggesting that it adopt a site-specific approach to reducing impingement mortality similar to the proposed approach for addressing entrainment, rather than uniform national requirements for IM and a site-specific approach for entrainment only. Should EPA decide to adopt uniform national performance or technology based standards for IM, as in the proposal, EPA is also considering a number of flexibilities, such as the site-specific approach for measuring compliance with IM limits detailed in section III.B.4 below. EPA also received requests to meet with or hold conference calls with a number of stakeholders to discuss each of these approaches. The stakeholders with whom EPA met include the Utility Water Act Group (UWAG), the Clean Energy Group (CEG), the Cooling Water Intake Structure Coalition, the Association of Clean Water Administrators (ACWA), and Riverkeeper, as well as several individual firms and companies. Documentation of these meetings may be found in EPA's docket (11–6500). The following sections present the data and suggested approaches EPA may use in developing the final rule.

B. Alternative Approaches Under Consideration

1. Site Specific Approach for Reducing Impingement Mortality

EPA received a number of comments suggesting that it adopt a site specific approach for both IM and entrainment, rather than uniform national requirements for IM and a site-specific approach for entrainment only. At proposal, EPA considered an approach that would establish both impingement and entrainment mortality requirements on a case-by-case basis taking into account the factors at a particular facility, but did not propose such an approach based on its preliminary determination at proposal that there are low cost technologies for impingement mortality that are available, feasible, and demonstrated for facilities on a national basis (76 FR 22174, Section VI.D.4). EPA recognizes both advantages and disadvantages of uniform national requirements. Such requirements would ensure a minimum level of IM reduction at all facilities. Moreover, if the final rule provides additional flexibility such as those measures discussed in Section III.B.3, it is EPA's understanding, based on comments received and its own technical analysis, that a substantial majority of the industry would meet the IM limitations based on model technologies considered by the Agency (see Section III.B.3 for more information). However, uniform national requirements may also be challenging to implement on a national level, given the wide range of facility types and intake structure configurations covered by the rule. Commenters stated that in some cases the technologies available for a particular site may not be able to achieve the IM limitations. Commenters further stated that, in certain circumstances, the costs of impingement technologies may be unusually high due to site-specific factors. EPA is now considering whether to adopt an approach that would allow establishment of impingement controls on a site-specific basis either generally or limited to those circumstances in which the facility demonstrated that the national controls were not feasible. Under such an approach, the facility could demonstrate to the Director that site-specific factors warrant a site-specific BTA for both entrainment and IM. The comprehensive study and other planning requirements could be enhanced to include information that the permitting authority would use to determine site-specific BTA for both entrainment and IM. The decision criteria for choosing BTA would be the same for IM and for entrainment, and EPA expects that permitting authorities and facilities would view the two together in an integrated planning and decision making framework. EPA requests comment on such an approach

and further information on why uniform controls should not be adopted.

2. Closed-Cycle Recirculating Systems

EPA received a number of comments suggesting that a facility (or intake) employing a cooling tower as a closed-cycle recirculating system (CCRS) should be exempt from IM requirements. EPA did not propose that a facility that fully employs cooling towers would automatically meet the IM standards for a number of reasons. First, the largest facilities with wet cooling towers still have the potential to withdraw significant volumes of water; in some cases, 100 MGD or more in makeup water alone. Second, at proposal, EPA did not provide an additional alternative that specifically established cooling towers as a pre-approved technology for complying with the IM limits because data from EPA's industry questionnaire and site visits indicate that most intakes providing cooling water to a cooling tower already met the proposed intake velocity limitation of less than or equal to 0.5 feet per second [DCN 11–6601].[1] Further, based on the performance observed in site visits and questionnaires, EPA anticipated that a properly operated cooling tower installed as a retrofit would typically meet the proposed intake velocity limitation alternative.[2] Thus, EPA anticipated all facilities employing wet cooling towers would already meet the IM limitations. However, commenters pointed out that not all facilities employing a wet cooling tower or some other CCRS as their original technology (i.e., not a retrofit) would necessarily have been designed to meet the 0.5 feet per second intake velocity threshold.

Third, EPA has found several instances where a cooling tower has been installed but not operated to minimize the volume of water withdrawn. For example, EPA found in site visits that cooling water may be passed through a cooling tower to reduce the discharge temperature of the water, but little or no water was recycled back to the facility cooling system. In other words, the cooling tower was in place but cooling water was used in a single pass mode, with overall water use identical to a typical once-through cooling system, resulting in no reductions in impingement or entrainment. Operation in this manner is not feasible or in most cases even possible at a new facility because the intake at a new facility is only sized for supplying make-up and blowdown flows. Accordingly, in developing the existing facility definition for CCRS in the proposed rule, EPA began with the Phase I new facility rule definition of CCRS but added criteria to it in order to clarify the meaning of minimized make-up and blowdown flows. EPA proposed that a properly operated cooling tower is one that operates at a minimum cycles of concentration of 3.0 for freshwater and 1.5 for saltwater or brackish water. EPA solicited comment on this definition.

EPA does not intend for facilities to install cooling towers solely for the purpose of meeting the IM requirements. In fact, EPA expects all facilities could comply with the proposed IM requirements without relying on closed-cycle cooling. However, consistent with EPA's position that flow reduction is strongly correlated to reductions in impingement and entrainment,[3] a properly operated cooling tower would provide significant reductions in IM. An optimized cooling tower would typically reduce water usage by 94.9 percent to 97.5 percent, reflecting salt water and fresh water sources respectively. Thus, in this case, such a cooling tower would exceed the level of performance required by the proposed IM limitations.

EPA is now considering a further alternative compliance provision in the regulatory language that would allow the owner or operator of a facility to demonstrate compliance with the fish impingement mortality limitation though either defined technologies or studies that demonstrate the impingement mortality reduction performance of optimized travelling screens at a facility. This alternative could include a provision that would deem a facility in compliance with the IM limitations if the facility employed a CCRS (such as a wet cooling tower) that minimizes water withdrawals. In addition, EPA received many comments specific to the proposed definition of CCRS.

Some commenters stated that while they may have been effectively operating as closed-cycle units for many years, they have concerns with their ability to comply with the new definition. We continue to look closely at these comments. EPA may consider revising the definition of CCRS to provide existing facilities flexibility in demonstrating they already have a properly operated CCRS, such as a minimum level of flow reduction or water usage, a minimum level of cycles of concentration, and/or a narrative set of requirements demonstrating site-specific minimized make-up and blowdown flows. We request additional comment and supporting data, specifically including ways to define CCRS that accommodates those existing CCRS systems that are properly operated. EPA is also considering adopting the same definition of closed cycle cooling for the existing facilities rule that it used for the new facilities (and Phase II) rule. EPA acknowledges the argument that requirements for existing facilities should not be ''more stringent'' than the comparable requirements for new facilities. Some commenters have interpreted the proposed definition of closed cycle cooling to be ''more stringent'' than the definition used in the new facilities rule because it places additional restrictions on how a facility must be operated to be considered ''closed cycle.'' In the Phase II rule EPA included as a compliance option a demonstration that the facility ''[has] reduced or will reduce [its] flow commensurate with a closed-cycle recirculating system.'' EPA requests comment on using similar language for a compliance option in this rule.

Similarly, EPA is aware that a facility may obtain substantial flow reductions due to partial CCRS systems, variable speed pumps, seasonal operation, and other operational measures which result in reduced impingement. For example, a facility that reduces intake flow by half has reduced impingement by half; consequently, impingement mortality has been reduced by 50 percent. EPA is therefore considering adding in the final rule an opportunity for a facility to get credit for an equivalent reduction in impingement mortality when it reduces its intake flow (in comparison to a once-through cooling system). Thus, the regulatory language could provide for submission of such information as part of a performance study provided to the permit writer to demonstrate compliance with the impingement mortality limitations. Section 4 below describes how the credit for flow reductions could be used to determine compliance with the IM limitations.

3. Measurement of Intake Velocity

EPA proposed an intake velocity limitation corresponding to a facility's design intake flow (DIF) as a design

[1] EPA also notes that the Phase I new facility rule requires low intake velocity (0.5 feet per second) in addition to flow reduction commensurate with closed cycle cooling.

[2] In a retrofit scenario, the facility's pre-retrofit intake velocity would have been calculated for flow through multiple intake screens. After the retrofit, the volume of water withdrawn is significantly reduced, but is often still withdrawn through the same number of screens, leading to a significantly reduced intake velocity.

[3] See, e.g., 69 FR 41576, July 9, 2004, Section VII.C.1. A reduction in flow leads to a corresponding reduction in impingement and entrainment.

standard for demonstrating compliance with the IM limitation. EPA's record shows an intake velocity of 0.5 feet per second or lower provides similar or greater reductions in impingement, and therefore impingement mortality, than the BTA technology of modified traveling screens. Therefore EPA proposed the intake velocity limitation as a compliance alternative. EPA is aware that low intake velocity is sometimes confused with velocity cap technologies, and EPA would like to clarify that these concepts are not the same. Most velocity caps do not operate as a fish diversion technology at low velocities, and in fact are often designed for an intake velocity exceeding one foot per second. Thus a velocity cap will not typically meet the low intake velocity impingement mortality limitation. The velocity cap is located offshore and under the water's surface, and uses the intake velocity to create variations in horizontal flow which are recognizable by fish. The change in flow pattern created by the velocity cap triggers an avoidance response mechanism in fish, thereby avoiding impingement.

The proposed velocity IM limitation is based on DIF, thus the calculated velocity would reflect the maximum intake velocity as water passes through the structural components of a screen, measured perpendicular to the screen mesh. If the intake does not have a screen, EPA assumes that in most cases the maximum intake velocity is perpendicular to the opening of the intake.

The following discussion explains how velocity would be determined, and thus compliance with the intake velocity limitation demonstrated. In general, EPA anticipates the first point of contact of the intake with the source water is the likely point of compliance, and would be the location for measurement of intake velocity. For example, some intakes use a channel or canal to transport the water to the facility. In those cases, the point of measurement is typically the channel or canal entrance, and not at the screen face of the facility's forebay. Similarly, if a facility employs a velocity cap, the point of measurement is the velocity cap opening (as described above, most velocity caps would not have a velocity low enough to meet the 0.5 feet per second limitation, but some may).

In the proposal, EPA clarified that DIF need not be the original design of the facility. For example, redundant pumps, emergency service water, and fire suppression systems could be excluded from a facility's DIF. As an additional flexibility, EPA proposed to allow actual intake velocity to be used to demonstrate compliance with the maximum intake velocity requirement. In this case, the actual flow (i.e., volume) across the screen surface area would be used to calculate the maximum expected velocity through that screen. The proposed rule indicated that the maximum velocity must be achieved under all conditions, including during minimum ambient source water surface elevation and during periods of maximum head loss across the screens or other devices during normal operation of the intake structure.

EPA received several comments regarding the velocity compliance alternative. For example, some comments suggested that the requirement to meet the intake velocity ''under all conditions'' was overly conservative and may render this alternative technologically infeasible and/or economically impracticable. These comments provided data suggesting infrequent events with short durations can occur, during which time the intake velocity could increase to a rate greater than 0.5 feet per second. Examples of such events might include variations in river flows related to other uses of the water, weather related variations (e.g., reduced or increased precipitation) or flow changes related to dams. Some comments indicated these short duration events would not result in measurable harm related to increased impingement. Other comments point out that monitoring velocity at screens with low levels of screen blockages (such as the maximum of 15 percent allowable blockage presented in the proposed rule) is technically problematic with standard ⅜ inch mesh screens. It was further suggested that changes to pressure or flow as a means of measuring velocity are often indiscernible under such conditions. Industry comments also indicated that, in general, debris fouling is minimized through typical operations and maintenance procedures that must be performed to ensure that cooling water flow is not disrupted. For example, a facility would not allow conditions that could result in pump cavitations, other damage to circulating water pumps and their related systems, or anything else that could compromise cooling capabilities or affect plant reliability.

EPA also received comments suggesting that a direct velocity measurement posed technical challenges. Some of these comments suggested that EPA provide the flexibility to calculate velocity based on other direct measurements, such as water depth, pressure differential, and plant intake flow. Based on the comments and data received in response to the proposed rule, EPA is actively considering changes to the intake velocity compliance alternative, as described below.

Actual through-screen intake velocity can be measured directly. However, after further discussion with vendors, EPA is aware that some sites may have difficulty measuring through-screen velocity (DCN 11–6602). EPA is considering rule language clarifying that velocity may be calculated from a facility's actual intake flow rate (AIF), the screen open face area, and the source water surface elevation at the time of flow measurement. (If there is no screen, the opening of the intake is the open face area.) The volumetric intake flow would be representative of routine operations, and may not include periods of zero flow. As with DIF, the point of measurement would be the point of first contact with the source water (e.g., the canal entrance, velocity cap opening, or shoreline screen face).

To demonstrate compliance with the actual intake velocity criteria, EPA expects that a facility would record the average monthly velocity. This would be measured directly or calculated from the volumetric flow and source water surface elevation measured no less frequently than once per week reflecting normal operations. Such measurements would already reflect current water levels; therefore a separate evaluation of low flow conditions would be unnecessary. For example, low source water elevation over a three month period would be represented in the measured or calculated through-screen velocity and reflected in the reported monthly values. However, it was not EPA's intention to penalize a facility in the event of unusual and irregular conditions. Thus, for example, in an unusual circumstance that causes the surface elevation to be low for just one day, it may be acceptable that this condition is not represented in the reported data because it does not reflect conditions that are likely to have a lasting impact on aquatic life. EPA solicits data on all of these assumptions and solicits comment on making this clear in the final regulatory text or preamble to the final rule.

It is important to clarify that the velocity of water as it approaches the screen, or even immediately adjacent to the screen, is not equivalent to the through-screen velocity. The screen surface area decreases the area through which a given volume of water has to pass, therefore the velocity of the water increases as it passes through the screen. Because the velocity compliance option functions in two ways—

protecting fish from injury due to being impinged on the screen's surface, and allowing fish the opportunity to escape from the intake—EPA proposed that the point of compliance must be the velocity through the screen or intake structure and not at some point in front of the screen. Velocity at other points near the intake can vary based on many factors such as dead spots and hydraulic zones. However, as stated above, EPA understands that there may be technical challenges in some cases to measuring through-screen velocity. EPA will continue to consider comments from the proposal on this issue and may modify the monitoring requirements as appropriate.

For the Phase I rule, EPA compiled data from three studies on fish swim speeds and found that a velocity of 0.5 feet per second would protect 96 percent of fish tested (66 FR 65256, December 18, 2001, Section V.B.1.b.1). EPA recognizes that the flow directly in front of a screen designed for 0.5 feet per second through-screen velocity will always be lower than the velocity standard (it may be as much as half the through-screen velocity in the case of a standard ⅜ inch screen). Therefore, EPA's proposed velocity standard as measured through the screen surface already includes a margin of safety. This potentially allows more fish to sense the change in velocity and invoke an avoidance response before being impinged. Because the 0.5 feet per second limit as a through-screen measurement already includes a margin of safety, EPA's current view is that additional criteria regarding screen blockage and related monitoring may be unnecessary. EPA solicits comment on the data and possible changes to the rule language for the intake velocity design standard to reflect such modifications.

4. Impingement Mortality Limitations

EPA proposed two ways in which a facility could demonstrate compliance with the impingement mortality limitations. The owner or operator of the facility could conduct monitoring to show the specified performance standards for impingement mortality of fish and shellfish have been met through use of any appropriate best performing technology, or they could demonstrate to the permitting authority that the intake velocity meets the specified design criteria. The performance standards for impingement mortality were proposed as monthly and annual limitations in impingement mortality, measured as a percent mortality not to be exceeded. These proposed standards were applicable to all existing facilities with a DIF greater than 2 MGD. EPA specifically solicited comments on how to give credit for existing technologies, and using those site-specific adjustments to implement the national uniform IM standard in a site-specific manner. The data and comments on this approach will be further discussed in sections 4 and 5.

As explained in the proposed rule, EPA applied four general criteria when reviewing studies for acceptance in the impingement analyses: (1) The data must be specific to the technology under consideration; (2) impingement mortality must have been reported as an absolute number or a percentage of impinged fish that were killed; (3) the data must reflect technology performance that is representative of conditions that exist under actual facility operations, and; (4) reported values must be actual measurements, rather than estimates. EPA based the proposed limitations on the performance of modified traveling screens with a fish return system. Additional criteria were used to select data as the basis for impingement mortality calculations. The limitations were based on all life stages of fish collected or retained in a ⅜ inch sieve and held for a period of 24 to 48 hours to assess latent mortality. Further, EPA rejected studies that did not evaluate species typical of the location conducting the testing. At proposal, EPA found four data sets at three facilities in New York State that met these criteria; see Chapter 11 of the proposed Technical Development Document (TDD) for more information (DCN 10–0004; EPA–HQ–OW–2008–0667–1282).

As described in section I of this notice, EPA received more than 80 documents and studies, several of which include impingement studies. These additional studies represent facilities from a variety of geographic regions and waterbody types, and include a broader representation of species than those comprising the basis for the proposed rule limitations. EPA solicits comment on recalculating the impingement mortality limits using the new studies that meet EPA's criteria as just described. EPA also solicits comment on whether such a single monthly and annual limit could be sufficiently protective for all facilities and also recognize site specific variations. In response to the comments and data regarding fragile species and abundant species, EPA may consider alternative procedures to determining the limits, such as giving equal weight to each species instead of to the total organism counts, or determining different limits for different groups of organisms. Further, EPA has received several studies that include counts of shellfish. EPA is considering whether the revised limitation should include both fish and shellfish. Accordingly, EPA may eliminate the specific requirement to employ technologies comparable in performance to barrier nets in order to protect shellfish. Alternatively, EPA is considering whether the need for additional impingement controls for shellfish can be determined by the Director based on site-specific assessments and consideration of the species of concern for each facility.

In addition, EPA received information suggesting one or more of the acceptance criteria used to evaluate the studies for inclusion in EPA's calculations were too stringent. For example, EPA received comments and data concerning the holding time of 24 to 48 hours. Some studies suggest that shorter holding times may still be sufficient for purposes of determining latent mortality. Yet other information suggests comparable performance with ⅜ inch square mesh and ¼ by ⅛ inch mesh,[4] and therefore EPA solicits comment on including either technology specification in the limit calculations. EPA is reviewing these data and may revise the criteria as appropriate.

Many commenters suggested that EPA should consider modified traveling screens with a fish return as a pre-approved technology as this technology forms the BTA basis of numeric limits. Alternatively, comments suggested that EPA should streamline the permitting process and reduce monitoring for facilities employing the candidate BTA technology. Commenters went on to say if this technology is the candidate BTA technology, then the proper design, installation, operation, and maintenance should be deemed compliant with any limit based on the technology.

EPA still views properly operated, modified traveling screens as BTA. Accordingly, EPA has concluded that an alternative compliance option that would streamline the permitting process as well as provide for reduced monitoring requirements may be appropriate for facilities employing the model BTA technology. The BTA technology properly operated according to best management practices would then be deemed compliant with the IM standards. Under this approach, EPA might require the facility to provide site-

[4] Note EPA still intends to exclude data for fine mesh screens to avoid confusion over the status of ''impinged entrainables'' (76 FR 22174, Section VI.B).

specific performance data to identify the operational conditions that would ensure that the technology is being operated appropriately. EPA's current understanding suggests that two-years of data may be an appropriate amount to make this determination. Note the biological monitoring conducted as part of a performance study would not be used to demonstrate compliance with the limit, but rather would be used to help set operational parameters for the facility. The performance data could consist of a two year study focused on the operational conditions that optimize the proper design, installation, operation and maintenance of modified traveling screens with fish return systems. A facility could use relevant data already collected as part of the study, or conduct a new two-year performance study. Once these operational conditions have been identified, EPA would expect the permit writer to incorporate these operational parameters as conditions of the permit.

The data from EPA's technical survey shows at least 79 percent of existing power plants have traveling screens. EPA realizes not all facilities could retrofit existing traveling screens to modified traveling screens. In particular, the installation of a fish handling and return system is not feasible at some facilities. However, EPA expects the majority of those facilities currently employing traveling screens would modify their traveling screens to comply with the IM limitations. Therefore, EPA expects these same facilities could take advantage of the reduced monitoring requirements and the streamlined compliance associated with this alternative. Further, EPA's data show 15 percent of facilities meet the low intake velocity limitation. Combining all of the IM limitation alternatives, EPA anticipates more than 90 percent of the facilities could take advantage of design standards rather than choosing to comply with the numerical IM limitations if EPA adopted this approach. EPA expects some facilities would explore innovative and creative approaches taking site-specific characteristics of their facility into account to provide performance comparable to the BTA technology, and EPA would maintain the numerical IM limitation to provide for such flexibilities. EPA solicits comment on providing this compliance flexibility and data on these assumptions.

Under this approach, as long as the owner or operator of the facility complies with the specified operational conditions, the impingement mortality limitations would be deemed to have been met. Subsequently, the owner or operator would not have to conduct any biological monitoring to show compliance with the impingement mortality limitations. In subsequent permit terms, and in the absence of major changes to the operation of the intake structure or the biology of the source water, EPA expects the Director would waive any further requirement for a study or compliance monitoring for the facility. EPA is considering modifying the regulations to provide specifically for such a waiver. If EPA were to adopt these revisions in the final rule, EPA would make corresponding changes to the permit application requirements. EPA solicits comment on this alternative approach for compliance with IM standards. The Agency also takes comment on the appropriate level of data for assuring that the technology is operated suitably to minimize adverse environmental impact. For example, EPA solicits comment on whether some monitoring of operational parameters should be required in lieu of biological monitoring, whether EPA should specify some minimum set of operational parameters, or whether such a determination is best left to the discretion of the permitting authority.

EPA also received comments regarding the need for separate requirements to address entrapment. Some commenters indicated that the requirements in the proposed rule would not be feasible to implement at all facilities. EPA is considering these comments and requests specific information on issues related to the feasibility of preventing entrapment, including examples of where it is impractical or infeasible to return entrapped organisms to the waterbody or prevent their entrapment in the first place. EPA will consider this information as it finalizes the rule.

5. Credit for Existing or Newly Installed Technologies

EPA's objective in establishing the IM limitations is to minimize adverse environmental impacts by ensuring that fewer aquatic organisms such as fish and shellfish are killed by cooling water intake structures. The limitations are based upon the model best technology available which reduces impingement mortality of fish and shellfish. As EPA's proposal noted, this model technology does not include, nor account for, elements of impingement reduction technologies already installed at some facilities. There are many cases where facilities have installed and continue to operate technologies to reduce impingement. These technologies may have been approved by the appropriate permitting authorities, including required provision of supporting studies and assessments of the impact of the plant on the local aquatic environment. However, these technologies may not have been designed in such a way that they would meet the proposed IM requirements, particularly the monthly and annual IM numeric limits. Further, the structure and design of the proposed rule IM numeric limits make accounting for the benefits of these existing technologies very difficult. For example, EPA received new information showing diversion technology at one specific facility reduced impingement of one or more species by more than 90 percent, and consequently, fewer fish would have been killed as a result of impingement mortality. However, the limitations are strictly based upon the performance of the model technology and were derived by applying statistical methods to observed data from facilities with the model technology.

In the proposal, EPA intended that facilities would receive credit for both pre-existing and/or newly installed technologies when demonstrating compliance with the statistically derived IM limitations. After reviewing the comments, EPA is providing additional discussion of how reductions in impingement may be used to comply with the IM requirements. In meeting EPA's overall objective, a facility should be able to take credit for reducing the number of organisms killed by a CWIS regardless of the technology used. If the alternative provision were to provide credit for other technologies, the facility would need some way to demonstrate that the technologies result in no more impinged fish being killed than would have resulted from the model technology (modified traveling screens) alone. With these alternative provisions that EPA is considering, it is possible that a facility might be able to meet the limitations by means other than installing and operating the model technology. EPA examined the effect of alternative provisions in demonstrating compliance with the annual average limitation and the monthly average limitation.

In establishing the IM limitations, EPA seeks to minimize impingement mortality on an ongoing basis, each year, at a level that is achievable for a facility. Both the annual average limit and monthly average play an important role in ensuring that facilities optimize performance of their technology. Compliance with the monthly average limitation is demonstrated by comparing the average IM value from the samples collected during each

month (or other 30-day period designated by the Director). At the end of the 12-month period, the facility calculates the annual average as the arithmetic average of the monthly averages during that period. The facility would then compare its annual average to the annual average limitation to demonstrate compliance.

With the alternative provisions that the Agency is considering, a facility would provide use data from long-term (e.g., 1–2 year) performance studies and/or calculation baseline assessments to quantify the impingement and/or IM reductions relative to what would be expected from the model technology alone. Because monthly averages are used to demonstrate compliance with both monthly average limitation and annual average limitation (i.e., monthly averages are averaged to produce the annual average), facilities would incorporate estimated reductions into the monthly average IM percent calculations. To calculate an adjustment using only data for a particular month (e.g., June) would require data for a very long term, such as 4-years or more. EPA would not require, nor recommend, this level of refinement in the calculations for two reasons. First, EPA does not expect that many facilities would have such long-term data available. Second, the calculations for each month would require a different set of adjustments that would create additional, unnecessary, complications for the facility and permit authority. To simplify the adjustment procedures, a facility would estimate the monthly reduction using the total reduction divided by the number of months in the study. The facility then would use this estimated monthly value to adjust the observed numbers of impinged fish and killed fish in the IM percent calculations for each and every month. Depending on the technology used, the reductions would be to the number of impinged fish and/or number of impinged fish that do not survive the holding time (''killed fish'').

If the technology reduces impingement, the alternative provision calculations would increase the number of the observed impinged fish by the estimated number that would have been impinged without the technology. The monthly average calculation then would compare the observed number of killed fish to the larger total number of impinged fish (i.e., the sum of observed and estimated number reduced by technology). This comparison would result in a lower IM rate than the unadjusted, observed value.

The adjustments to the monthly average calculations, in turn, affect the value of the annual average calculated by the facility, because the facility's annual average is set equal to the arithmetic average of the monthly averages. In other words, the facility's annual average is solely based upon the values of the monthly averages. Thus, when the monthly averages are adjusted downward by the alternative provisions, the annual average also will be adjusted.

The following example illustrates how the alternative provisions would adjust for flow, location, and other technologies in demonstrating compliance with the IM monthly average limitations. The example uses values that simplify the calculations to better illustrate the adjustments, and are not intended to reflect values that EPA expects at any facility. To simplify the example further, the facility has only fish and does not have shellfish in its source waters. EPA also recognizes that facilities often examine the combined effect of two or more technologies (e.g., deterrents and offshore location) within a single study. In applying the alternative provision, the facility could use the outcomes associated with the combined performance of multiple technologies. However, for a more complete example, EPA has chosen a hypothetical facility that examined each change in a separate study.

The hypothetical facility is located at an offshore location, has a velocity cap, and installed variable speed drives. For the purposes of this example, assume its permit requires that it collect samples once a week and evaluate the impinged fish after 24 hours. The facility has just completed sampling at the forebay each week during June, and has identified the counts of the facility specific species of concern as follows. The four samples had 1,500, 1,000, 500, and 1,000 impinged fish, for a total of 4,000 impinged fish. During the 24-hour holding period, 400, 100, 150, and 350 fish died, for a total of 1,000 dead fish. The facility then calculated the forebay's IM as 25 percent, using the equation provided in the proposed rule preamble (76 FR 22174, Section IX.F.1) as follows:

$$\% \text{ IM} = \frac{\text{(impinged fish that are killed)}}{\text{(total number of impinged fish)}} \times 100$$

$$= (1{,}000/4{,}000) \times 100$$

$$= 25\%$$

To adjust the observed percent IM for its offshore location and velocity cap, the facility first extracts information from its previously conducted studies related to performance and calculation baseline. For the offshore location adjustment, fish density and flow data show the offshore location reduces the rate of impingement for all species of concern by 30,000 fish annually, or, on average, 2,500 each month (i.e., calculated as 30,000 fish divided by12 months). For the velocity cap, performance data show the velocity cap reduces impingement of fish and shellfish by 24,000 organisms annually, or a monthly average of 2,000 organisms. Therefore, the facility has reduced impingement of all species of concern, on average each month, by 4,500 organisms (i.e., sum of 2,500 for offshore location and 2,000 for velocity cap). The facility then applies the reduction to the denominator of the percent IM calculations as follows:

$$\% \text{ IM} = \frac{\text{(impinged fish that are killed)}}{\text{(total number of impinged fish)}} \times 100$$

$$= (1{,}000/4{,}000) \times 100$$

$$= 25\%$$

In summary, calculating percent IM at the forebay yields a 25 percent IM, and then applying the alternative provisions for other technologies shows the effective percent IM is 12. Next, to adjust for the variable speed drives, the facility has determined from engineering and design calculations that the volume of cooling water flow has been reduced by 11 percent. The volume of reduced flow multiplied by the density of fish near the intake is calculated, and the facility projects that the reduced flow excludes, on average for each month, an additional 1,100 fish from impingement. Then the facility would apply the reduction in impinged fish to the denominator, as follows:

$$\% \text{ IM} = \frac{\text{(impinged fish that are killed)} \times 100}{\text{(total number of impinged fish + reductions in fish impinged due to other technologies)}}$$

$$= ((1{,}000 / (4{,}000 + 4{,}500)) \times 100$$

$$= 12\%$$

This example is intended to illustrate how facilities would obtain credit for existing technologies. While this example includes a velocity cap, it does not imply that a velocity cap is the appropriate technology for all facilities. EPA's data shows in most cases, a properly located velocity cap alone would be sufficient to achieve the limitations. In the case where a velocity cap (or any other technology) alone would not be sufficient to meet the limitations, EPA expects that each facility would identify and install a suite of cost effective technologies to achieve the IM requirements (i.e., variable speed drives in this example). EPA solicits comment on whether this approach reasonably addresses commenters' request that EPA identify velocity caps to be a pre-approved BTA for IM by appropriately taking into account facilities' existing technologies in determining whether a facility meets the proposed IM requirements. In summary, the hypothetical facility would observe a 25 percent IM rate for June; which would then be adjusted downward to 12 percent for its offshore location and velocity cap; and then further adjusted downward to 10 percent for its flow reduction. The value that the facility would report for compliance purposes would be the 10 percent value. At the end of the 12-month monitoring period, the facility also would use the 10 percent value for that month with the other 11 adjusted monthly values to calculate the annual average IM rate. In the final rule, EPA may decide to include the equations for calculating IM and the alternative provision in the rule language to provide additional clarity. EPA solicits comment on how frequently a facility would need to calculate credit for existing technology after the initial demonstration.

Comments from some Phase II facilities indicate facilities may have already collected data and performed baseline calculations required as part of the 2004 Phase II rule. While EPA identified considerable challenges implementing calculation baseline in the 2011 proposed rule (76 FR 22174, Section III.B.1), these commenters went on to suggest that a facility should have the option to use these data and analyses in demonstrating compliance with the IM limitations. In many cases these data are sufficient to show their site specific impingement rates as well as the performance of any technologies installed at their site. Therefore, EPA is considering a provision that would allow existing facilities to use data already collected as part of a site-specific analysis of calculation baseline to demonstrate compliance with the alternative provisions. EPA solicits comment on these data and possible changes to the rule language for providing credit in reductions in impingement calculations to demonstrate compliance with the annual average and monthly average IM limitations.

EPA recognizes that it may be challenging for a facility to determine in some cases what its calculation baseline should be, particularly if it has had a technology in place for many years. Thus it may be difficult to establish precisely what the performance of a technology is relative to a situation in which the technology was not employed (a situation that may not have existed at the facility for a long time). EPA is thus also considering identifying additional technologies (which could include velocity caps) as satisfying the IM performance standards without having to conduct the type of study and calculation discussed in this example. EPA requests comment on this approach, on what technologies could be deemed compliant under this approach, and on what requirements or demonstrations would be appropriate to establish the technology as a compliance alternative. EPA also requests comment on whether the final rule should allow permitting authorities to approve additional technologies as satisfying the IM requirements, and if so, what specific demonstrations or procedures would be appropriate for permitting authorities to use in making such determinations.

6. Facilities With Low Impingement Rates

EPA received data showing some facilities have very low impingement

rates. This is usually due to intake location for the specific waterbody from which water is withdrawn for cooling, or the implementation of other technologies. For example, EPA is aware of a facility located on the inside bend of a large freshwater river which seasonally employs large mesh barrier nets. The facility impinges an average of several fish per month. In another case, the intake is located downstream of a dam, and the fish avoid the cold water coming from the dam. Recent data show the facility impinged one fish over two 24 hour periods. Under such low impingement rate conditions, technology performance is unlikely to be meaningfully evaluated. Moreover, in EPA's view, these facilities are not likely having an adverse effect on aquatic life. It is probable that in most cases requiring additional technology would not be necessary to further minimize adverse environmental impacts.

EPA has received several suggestions on how to establish requirements for such facilities with very low impingement rates. One suggested approach was to establish an exemption based on an annual limit on biomass impinged. EPA found a small number of studies have available performance data that are expressed as biomass, and the amount of data within these studies are generally limited (see proposed TDD, Chapter 11, Appendix B). Another approach that would be easier to implement is to establish an annual limit on the absolute number of fish that may be impinged. Facilities meeting this limit on the rate of impingement would be deemed in compliance with the IM limitations, and therefore would not be required to install additional technologies. In other words, the existing technology in place would be deemed BTA for that facility. Alternatively, if EPA were to consider the number of fish killed (rather than as a percent of impinged fish) as a limitation for the final rule, EPA might statistically model the data to derive the limit, or EPA may select the minimum observed value (see TDD, Chapter 11, Appendix D for further discussion of the methodology).

Comments by some state agencies indicated concern that such an approach does not fully consider the affected species. For example, while the total number of impinged fish that die might be low, they might all be species of concern, or may include a locally important species under NOAA's NMFS conservation watch status. If EPA adopts this approach, EPA might need to provide certain safeguards to ensure adequate protection of specific fish populations.

EPA is considering authorizing the permit writer to determine that a facility using a given technology complies with the IM requirements because it does not impinge greater than some absolute number of fish. Such a provision would then authorize the Director to make a site-specific determination that the facility is already employing BTA. Under this approach, a facility impinging fewer than the specified number of organisms might submit some minimum amount (e.g., two years) of impingement rate or impingement mortality data, including a demonstration that no threatened and endangered (T&E) or other protected species are identified in the vicinity of the intake. Additional factors the Director should consider might include any impacts to significant recreational or commercial fisheries, a review of locally important aquatic life such as those identified by NOAA's NMFS regarding local or state conservation status of any species of concern, value of impinged species, prevalence of nuisance or invasive species, or other local conditions. The Director could then make a determination that the very low impingement rate is BTA due to the facility's existing technology. EPA solicits comment on the data and approaches under consideration for facilities that already have very low impingement rates. EPA also solicits comment on whether EPA should identify in the final rule a specific upper limit on what could be considered a very low level of impingement mortality, or if this should be left to the discretion of the permitting authority. In addition, as noted above, EPA is soliciting comment on recommendations it received following proposal that EPA consider a regulation under which impingement requirements (like entrainment requirements) would be established on a site-specific basis. If EPA adopted the approach proposed for entrainment, the permit writer could weigh site-specific costs and benefits, among the factors being assessed, in the decision whether to require further impingement controls. EPA also requests comment on a hybrid approach under which the permittee could choose among several compliance options that might include both meeting an IM performance standard or requesting a site-specific determination of BTA for both impingement and entrainment, if the benefits of meeting the performance standard did not justify the costs on a site-specific basis. This could be structured in a manner similar to the ''cost-benefit variance'' that was included as a compliance option in the final Phase II rule. EPA requests comment on all of these approaches.

7. Species of Concern

In recognizing the variability in each facility's source water characterization, particularly with respect to the specific species and life stages of fish and shellfish, EPA proposed the IM standards should be applied to site-specific species of concern. EPA intended this provision to provide flexibility to the Director to focus the technology based requirements on those species deemed important at a given site. Some commenters indicated that many states have already determined the species of concern as inclusive of forage fish, fragile fish, and abundant representative indicator species. Therefore, commenters indicated EPA's intended flexibility might not work.

In this notice, EPA is clarifying the proposed rule approach to species of concern is intended to allow the Director to prioritize certain fish and shellfish in a site-specific manner. EPA generally intended that the highly abundant, fecund forage fish species (such as the clupeid species) would not be considered species of concern. However, the Director could determine such species are species of concern if they were considered: Important migratory or commercial species; threatened or endangered; or of insufficient abundance in the source water to support the growth and abundance of those species that prey upon them. To provide the Director with the appropriate data to make such a determination, and to avoid the unnecessary burden of requiring a facility to comply with the IM limitations for all species, EPA is considering a regulatory provision that would distinguish representative indicator species (RIS) from the site-specific species of concern. Under such an approach, a facility may be required by the Director to monitor for those species identified as RIS, but the IM limitations would only be applicable to the species of concern. The species of concern would not necessarily include all RIS. EPA solicits comment on the data and approaches under consideration here that best address the variability in species and life stages of fish and shellfish. Alternatively, EPA takes comment on the suggested addition of defined species of concern, explicitly identifying those specific species that are not subject to the IM limitations.

III. General Solicitation of Comment

EPA encourages public participation in this rulemaking and requests comments on this notice of data availability supporting the proposed rule for cooling water intake structures.

EPA invites all parties to coordinate their data collection activities with the Agency to facilitate mutually beneficial and cost-effective data submissions. Please refer to the **FOR FURTHER INFORMATION CONTACT** section at the beginning of this preamble for technical contacts at EPA.

To ensure that EPA can properly respond to comments, the Agency prefers that commenters cite, where possible, the paragraph(s) or sections in the document or supporting documents to which each comment refers. Please submit copies of your comments and enclosures (including references) as specified in the **ADDRESSES** section at the beginning of this preamble.

Dated: May 31, 2012.

Nancy K. Stoner,

Acting Assistant Administrator, Office of Water.

[FR Doc. 2012–14153 Filed 6–11–12; 8:45 am]

BILLING CODE 6560–50–P

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Medicare & Medicaid Services

42 CFR Parts 412, 413, 424, 476, and 489

[CMS–1588–CN]

RIN 0938–AR12

Medicare Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Fiscal Year 2013 Rates; Hospitals' Resident Caps for Graduate Medical Education Payment Purposes; Quality Reporting Requirements for Specific Providers and for Ambulatory Surgical Centers; Corrections

AGENCY: Centers for Medicare and Medicaid Services (CMS), HHS.

ACTION: Proposed rule, correction.

SUMMARY: This document corrects technical and typographical errors in the proposed rule that appeared in the May 11, 2012 **Federal Register** entitled ''Medicare Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Fiscal Year 2013 Rates; Hospitals' Resident Caps for Graduate Medical Education Payment Purposes; Quality Reporting Requirements for Specific Providers and for Ambulatory Surgical Centers.''

FOR FURTHER INFORMATION CONTACT: Tzvi Hefter, (410) 786–4487.

SUPPLEMENTARY INFORMATION:

I. Background

In FR Doc. 2012–9985 of May 11, 2012 (77 FR 27870), there were a number of technical errors that are identified and corrected in the Correction of Errors section of this correcting document.

II. Summary of Errors

A. Errors in the Preamble

On pages 27871 and 27872, we inadvertently omitted a number of acronyms from the list of acronyms.

On page 27938, in our discussion of the fiscal year (FY) 2013 applications for new technology add-on payments, we made typographical errors regarding the drug combination administered during the treatment of methotrexate (MTX)-induced renal dysfunction.

On page 28021, we inadvertently cited the incorrect timeframe for when certain long-term care hospitals (LTCHs) and LTCH satellite facilities must comply with § 412.534 and § 412.536. We also cited the incorrect timeframe for when those LTCHs and LTCH satellite facilities would be under the proposed moratorium on the 25-percent adjustment threshold policy.

On page 28036, we made several typographical errors in our discussion of commenters' beliefs regarding the hospital inpatient quality reporting program (HIQR) and five Agency for Healthcare Research and Quality (AHRQ) measures.

On page 28039, in our discussion of the HIQR proposed new claims-based measure for the FY 2015 payment determination for hip/knee complication, we inadvertently repeated a sentence.

On page 28041, in our discussion of the HIQR proposed new claims-based measure for the FY 2015 payment determination for hip/knee readmission, we made a typographical error in a section heading.

On page 28072, in our discussion of the total amount available for value-based incentive payments under the Hospital VBP Program for a fiscal year, we inadvertently included estimated reductions to the base operating DRG payment amounts for Maryland hospitals in the calculation of the total estimate for FY 2013.

On pages 28085 and 28086, in our discussion of the proposed performance standards for the Hospital Value-Based Purchasing (VBP) Program, we inadvertently omitted data from the table entitled ''Proposed Performance Standards for the FY 2015 Hospital VBP Program Clinical Process of Care and Outcome Domains, and the Medicare Spending per Beneficiary Measure.''

On pages 28107, 28108, and 28127 in our discussion of the Inpatient Psychiatric Facilities Quality Reporting Program (IPFQR), we made technical errors in our description of the IPF facility enrollment.

B. Errors in the Addendum

On page 28143, we made errors in our discussion of the proposed outlier fixed-loss cost threshold for FY 2013.

On pages 28144, 28148, 28149, 28150, 28151, 28159, and 28178, we made technical and typographical errors in our discussion of the proposed outlier adjustment factors which affected the proposed FY 2013 Puerto Rico (specific) operating standardized amount and capital Federal rates (national and Puerto Rico). Specifically, we inadvertently applied the incorrect adjustment factors to the operating and capital cost-to-charge ratios (CCRs) from the Provider-Specific File (PSF) when performing the calculation of the FY 2013 outlier fixed-loss cost threshold for the proposed rule. The correction of this error resulted in a decrease in the proposed outlier fixed-loss cost threshold of approximately $1,000. Under our established methodology for calculating the outlier fixed-loss cost threshold, which we have proposed to continue to use for FY 2013, the corrected proposed outlier fixed-loss cost threshold continues to result in operating outlier payments being projected to be 5.1 percent of total operating payments. However, a decrease in the proposed outlier threshold results in an increase of the Puerto Rico (specific) operating outlier payments and capital (national and Puerto Rico) outlier payments. This is because a lower outlier threshold allows more cases to qualify as outlier cases and results in higher outlier payments to such cases. Because outlier payments are budget neutral, a larger reduction (that is, an increase in the outlier offsets) to the Puerto Rico and capital (national and Puerto Rico) rates is necessary. Therefore, the application of the corrected Puerto Rico and capital outlier offsets (national and Puerto Rico) lowers the proposed FY 2013 Puerto Rico (specific) operating standardized amount and capital Federal rates (national and Puerto Rico).