

§ 125.91

40 CFR Ch. I (7-1-06 Edition)

(c) *Alternative regulatory requirements.* Notwithstanding any other provision of this subpart, if a State demonstrates to the Administrator that it has adopted alternative regulatory requirements in its NPDES program that will result in environmental performance within a watershed that is comparable to the reductions of impingement mortality and entrainment that would otherwise be achieved under §125.94, the Administrator must approve such alternative regulatory requirements.

(d) Nothing in this subpart shall be construed to preclude or deny the right of any State or political subdivision of a State or any interstate agency under section 510 of the CWA to adopt or enforce any requirement with respect to control or abatement of pollution that is not less stringent than those required by Federal law.

§ 125.91 What is a “Phase II Existing Facility”?

(a) An existing facility, as defined in §125.93, is a Phase II existing facility subject to this subpart if it meets each of the following criteria:

- (1) It is a point source.
- (2) It uses or proposes to use cooling water intake structures with a total design intake flow of 50 million gallons per day (MGD) or more to withdraw cooling water from waters of the United States;
- (3) As its primary activity, the facility both generates and transmits electric power, or generates electric power but sells it to another entity for transmission; and
- (4) It uses at least 25 percent of water withdrawn exclusively for cooling purposes, measured on an average annual basis.

(b) In the case of a Phase II existing facility that is co-located with a manufacturing facility, only that portion of the combined cooling water intake flow that is used by the Phase II facility to generate electricity for sale to another entity will be considered for purposes of determining whether the 50 MGD and 25 percent criteria in paragraphs (a)(2) and (4) of this section have been exceeded.

(c) Use of a cooling water intake structure includes obtaining cooling water by any sort of contract or ar-

rangement with one or more independent suppliers of cooling water if the supplier withdraws water from waters of the United States but is not itself a Phase II existing facility, except as provided in paragraph (d) of this section. This provision is intended to prevent circumvention of these requirements by creating arrangements to receive cooling water from an entity that is not itself a Phase II existing facility.

(d) Notwithstanding paragraph (c) of this section, obtaining cooling water from a public water system or using treated effluent as cooling water does not constitute use of a cooling water intake structure for purposes of this subpart.

§ 125.92 [Reserved]

§ 125.93 What special definitions apply to this subpart?

In addition to the definitions provided in §122.3 of this chapter, the following special definitions apply to this subpart:

Adaptive management method is a type of project management method where a facility chooses an approach to meeting the project goal, monitors the effectiveness of that approach, and then based on monitoring and any other relevant information, makes any adjustments necessary to ensure continued progress toward the project's goal. This cycle of activity is repeated as necessary to reach the project's goal.

Annual mean flow means the average of daily flows over a calendar year.

All life stages means eggs, larvae, juveniles, and adults.

Calculation baseline means an estimate of impingement mortality and entrainment that would occur at your site assuming that: the cooling water system has been designed as a once-through system; the opening of the cooling water intake structure is located at, and the face of the standard 3/8-inch mesh traveling screen is oriented parallel to, the shoreline near the surface of the source waterbody; and the baseline practices, procedures, and structural configuration are those that your facility would maintain in

the absence of any structural or operational controls, including flow or velocity reductions, implemented in whole or in part for the purposes of reducing impingement mortality and entrainment. You may also choose to use the current level of impingement mortality and entrainment as the calculation baseline. The calculation baseline may be estimated using: historical impingement mortality and entrainment data from your facility or from another facility with comparable design, operational, and environmental conditions; current biological data collected in the waterbody in the vicinity of your cooling water intake structure; or current impingement mortality and entrainment data collected at your facility. You may request that the calculation baseline be modified to be based on a location of the opening of the cooling water intake structure at a depth other than at or near the surface if you can demonstrate to the Director that the other depth would correspond to a higher baseline level of impingement mortality and/or entrainment.

Capacity utilization rate means the ratio between the average annual net generation of power by the facility (in MWh) and the total net capability of the facility to generate power (in MW) multiplied by the number of hours during a year. In cases where a facility has more than one intake structure, and each intake structure provides cooling water exclusively to one or more generating units, the capacity utilization rate may be calculated separately for each intake structure, based on the capacity utilization of the units it services. Applicable requirements under this subpart would then be determined separately for each intake structure. The average annual net generation should be measured over a five year period (if available) of representative operating conditions, unless the facility makes a binding commitment to maintain capacity utilization below 15 percent for the life of the permit, in which case the rate may be based on this commitment. For purposes of this subpart, the capacity utilization rate applies to only that portion of the facility that generates electricity for transmission or sale using a thermal cycle

employing the steam water system as the thermodynamic medium.

Closed-cycle recirculating system means a system designed, using minimized make-up and blowdown flows, to withdraw water from a natural or other water source to support contact and/or noncontact cooling uses within a facility. The water is usually sent to a cooling canal or channel, lake, pond, or tower to allow waste heat to be dissipated to the atmosphere and then is returned to the system. (Some facilities divert the waste heat to other process operations.) New source water (make-up water) is added to the system to replenish losses that have occurred due to blowdown, drift, and evaporation.

Cooling water means water used for contact or noncontact cooling, including water used for equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes used, or from auxiliary operations on the facility's premises. Cooling water that is used in a manufacturing process either before or after it is used for cooling is considered process water for the purposes of calculating the percentage of a facility's intake flow that is used for cooling purposes in §125.91(a)(4).

Cooling water intake structure means the total physical structure and any associated constructed waterways used to withdraw cooling water from waters of the U.S. The cooling water intake structure extends from the point at which water is withdrawn from the surface water source up to, and including, the intake pumps.

Design and construction technology means any physical configuration of the cooling water intake structure, or a technology that is placed in the water body in front of the cooling water intake structure, to reduce impingement mortality and/or entrainment. Design and construction technologies include, but are not limited to, location of the intake structure, intake screen systems, passive intake systems, fish diversion and/or avoidance systems, and fish handling and return systems. Restoration measures

are not design and construction technologies for purposes of this definition.

Design intake flow means the value assigned (during the cooling water intake structure design) to the total volume of water withdrawn from a source waterbody over a specific time period.

Design intake velocity means the value assigned (during the design of a cooling water intake structure) to the average speed at which intake water passes through the open area of the intake screen (or other device) against which organisms might be impinged or through which they might be entrained.

Diel means daily and refers to variation in organism abundance and density over a 24-hour period due to the influence of water movement, physical or chemical changes, and changes in light intensity.

Entrainment means the incorporation of any life stages of fish and shellfish with intake water flow entering and passing through a cooling water intake structure and into a cooling water system.

Estuary means a semi-enclosed body of water that has a free connection with open seas and within which the seawater is measurably diluted with fresh water derived from land drainage. The salinity of an estuary exceeds 0.5 parts per thousand (by mass) but is typically less than 30 parts per thousand (by mass).

Existing facility means any facility that commenced construction as described in 40 CFR 122.29(b)(4) on or before January 17, 2002; and any modification of, or any addition of a unit at such a facility that does not meet the definition of a new facility at §125.83.

Freshwater river or stream means a lotic (free-flowing) system that does not receive significant inflows of water from oceans or bays due to tidal action. For the purposes of this rule, a flow-through reservoir with a retention time of 7 days or less will be considered a freshwater river or stream.

Impingement means the entrapment of any life stages of fish and shellfish on the outer part of an intake structure or against a screening device during periods of intake water withdrawal.

Lake or reservoir means any inland body of open water with some min-

imum surface area free of rooted vegetation and with an average hydraulic retention time of more than 7 days. Lakes or reservoirs might be natural water bodies or impounded streams, usually fresh, surrounded by land or by land and a man-made retainer (e.g., a dam). Lakes or reservoirs might be fed by rivers, streams, springs, and/or local precipitation.

Moribund means dying; close to death.

Natural thermal stratification means the naturally occurring and/or existing division of a waterbody into horizontal layers of differing densities as a result of variations in temperature at different depths.

Ocean means marine open coastal waters with a salinity greater than or equal to 30 parts per thousand (by mass).

Once-through cooling water system means a system designed to withdraw water from a natural or other water source, use it at the facility to support contact and/or noncontact cooling uses, and then discharge it to a waterbody without recirculation. Once-through cooling systems sometimes employ canals/channels, ponds, or non-recirculating cooling towers to dissipate waste heat from the water before it is discharged.

Operational measure means a modification to any operation at a facility that serves to minimize impact to fish and shellfish from the cooling water intake structure. Examples of operational measures include, but are not limited to: reductions in cooling water intake flow through the use of variable speed pumps and seasonal flow reductions or shutdowns; and more frequent rotation of traveling screens.

Phase II existing facility means any existing facility that meets the criteria specified in §125.91.

Source water means the waters of the U.S. from which the cooling water is withdrawn.

Supplier means an entity, other than the regulated facility, that owns and operates its own cooling water intake structure and directly withdraws water from waters of the United States. The supplier sells the cooling water to other facilities for their use, but may also use a portion of the water itself.

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An entity that provides potable water to residential populations (*e.g.*, public water system) is not a supplier for purposes of this subpart.

Thermocline means the middle layer of a thermally stratified lake or a reservoir. In this layer, there is a rapid change in temperatures between the top and bottom of the layer.

Tidal river means the most seaward reach of a river or stream where the salinity is typically less than or equal to 0.5 parts per thousand (by mass) at a time of annual low flow and whose surface elevation responds to the effects of coastal lunar tides.

EFFECTIVE DATE NOTE: At 71 FR 35040, June 16, 2006, §125.93 was amended by revising the definition of “existing facility”, effective July 17, 2006. For the convenience of the user, the revised text is set forth as follows:

§ 125.93 What special definitions apply to this subpart?

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Existing facility means any facility that commenced construction as described in 40 CFR 122.29(b)(4) on or before January 17, 2002 or July 17, 2006 for an offshore oil and gas extraction facility); and any modification of, or any addition of a unit at such a facility that does not meet the definition of a new facility at §125.83.

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§ 125.94 How will requirements reflecting best technology available for minimizing adverse environmental impact be established for my Phase II existing facility?

(a) *Compliance alternatives.* You must select and implement one of the following five alternatives for establishing best technology available for minimizing adverse environmental impact at your facility:

(1)(i) You may demonstrate to the Director that you have reduced, or will reduce, your flow commensurate with a closed-cycle recirculating system. In this case, you are deemed to have met the applicable performance standards and will *not* be required to demonstrate further that your facility meets the impingement mortality and entrainment performance standards specified in paragraph (b) of this section. In addition, you are not subject to the re-

quirements in §§125.95, 125.96, 125.97, or 125.98. However, you may still be subject to any more stringent requirements established under paragraph (e) of this section; or

(ii) You may demonstrate to the Director that you have reduced, or will reduce, your maximum through-screen design intake velocity to 0.5 ft/s or less. In this case, you are deemed to have met the impingement mortality performance standards and will not be required to demonstrate further that your facility meets the performance standards for impingement mortality specified in paragraph (b) of this section and you are not subject to the requirements in §§125.95, 125.96, 125.97, or 125.98 as they apply to impingement mortality. However, you are still subject to any applicable requirements for entrainment reduction and may still be subject to any more stringent requirements established under paragraph (e) of this section.

(2) You may demonstrate to the Director that your existing design and construction technologies, operational measures, and/or restoration measures meet the performance standards specified in paragraph (b) of this section and/or the restoration requirements in paragraph (c) of this section.

(3) You may demonstrate to the Director that you have selected, and will install and properly operate and maintain, design and construction technologies, operational measures, and/or restoration measures that will, in combination with any existing design and construction technologies, operational measures, and/or restoration measures, meet the performance standards specified in paragraph (b) of this section and/or the restoration requirements in paragraph (c) of this section;

(4) You may demonstrate to the Director that you have installed, or will install, and properly operate and maintain an approved design and construction technology in accordance with §125.99(a) or (b); or

(5) You may demonstrate to the Director that you have selected, installed, and are properly operating and maintaining, or will install and properly operate and maintain design and construction technologies, operational measures, and/or restoration measures