

**Phase I Rule – New  
Facilities**

(40 CFR § 125.83)

*Closed-cycle recirculating system* means a system designed, using minimized makeup 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.

**Remanded Phase II Rule  
Existing Facilities**

(69 Fed Reg 41576, at p. 41683)

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**Proposed Phase II Rule  
Existing Facilities**

(76 Fed Reg 22173, at p. 22281)

*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 or noncontact cooling uses within a facility, or a system designed to include cooling ponds that are not themselves a waters of the U.S. and that does not rely upon continuous intake flows of water. New source water (make-up water) is added to the system to replenish losses that have occurred due to blowdown, drift and evaporation. *Closed-cycle recirculating system includes, but is not limited to, wet or dry cooling towers. For cooling towers where the source for make-up water is freshwater or has a salinity equal to or less than 0.5 parts per thousand, minimized make-up and blowdown means operating at a minimum cycles of concentration of 3.0. For cooling towers where the source for make-up water is saltwater, brackish water, or has a salinity of greater than 0.5 parts per thousand, minimized make-up and blowdown means operating at a minimum cycles of concentration of 1.5. For facilities with a closed-cycle recirculating system other than a cooling tower, minimized makeup and blowdown flows means a reduction in actual intake flow of 97.5 percent for freshwater, and 94.9 percent for salt water or brackish water. (New language underlined.)*

CCC No Longer Impingement Compliant

Phase I Rule – New  
Facilities

Closed Cycle Cooling  
and intake velocity  
restrictions are  
required for all new  
facilities.

Remanded Phase II Rule  
Existing Facilities

(69 Fed Reg 41576, at p. 46185)  
(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.

Proposed Phase II Rule  
Existing Facilities

(76 Fed Reg 22173, at p. 22282)  
(b) BTA Standards for Impingement Mortality. By the dates specified in § 125.93, the owner or operator of an existing facility subject to this subpart must achieve the impingement mortality standards provided in paragraphs (b)(1), or (2), of this section:  
(Note – closed cycle cooling is not an approved technology for Impingement Mortality.)

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