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# Title 40

## PART 423 - STEAM ELECTRIC POWER GENERATING POINT SOURCE CATEGORY

**Authority:** Secs. 101; 301; 304(b), (c), (e), and (g); 306; 307; 308 and 501, Clean Water Act (Federal Water Pollution Control Act Amendments of 1972, as amended; 33 U.S.C. 1251; 1311; 1314(b), (c), (e), and (g); 1316; 1317; 1318 and 1361).

**Source:** 47 FR 52304, Nov. 19, 1982, unless otherwise noted.

### § 423.10 Applicability.

The provisions of this part apply to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, or gas), fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas), or nuclear fuel in conjunction with a thermal cycle employing the steam water system as the thermodynamic medium. This part applies to discharges associated with both the combustion turbine and steam turbine portions of a combined cycle generating unit.

[80 FR 67893, Nov. 3, 2015]

### § 423.11 Specialized definitions.

In addition to the definitions set forth in 40 CFR part 401, the following definitions apply to this part:

- (a) The term *total residual chlorine* (or total residual oxidants for intake water with bromides) means the value obtained using any of the “chlorine - total residual” methods in Table IB in 40 CFR 136.3(a), or other methods approved by the permitting authority.

- (b) The term *low volume waste sources* means, taken collectively as if from one source, wastewater from all sources except those for which specific limitations or standards are otherwise established in this part. Low volume waste sources include, but are not limited to, the following: Wastewaters from ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, recirculating house service water systems, and wet scrubber air pollution control systems whose primary purpose is particulate removal. Sanitary wastes, air conditioning wastes, and wastewater from carbon capture or sequestration systems are not included in this definition.
- (c) The term *chemical metal cleaning waste* means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.
- (d) The term *metal cleaning waste* means any wastewater resulting from cleaning [with or without chemical cleaning compounds] any metal process equipment including, but not limited to, boiler tube cleaning, boiler fireside cleaning, and air preheater cleaning.
- (e) The term *fly ash* means the ash that is carried out of the furnace by a gas stream and collected by a capture device such as a mechanical precipitator, electrostatic precipitator, or fabric filter. Economizer ash is included in this definition when it is collected with fly ash. Ash is not included in this definition when it is collected in wet scrubber air pollution control systems whose primary purpose is particulate removal.
- (f) The term *bottom ash* means the ash, including boiler slag, which settles in the furnace or is dislodged from furnace walls. Economizer ash is included in this definition when it is collected with bottom ash.
- (g) The term *once through cooling water* means water passed through the main cooling condensers in one or two passes for the purpose of removing waste heat.
- (h) The term *recirculated cooling water* means water which is passed through the main condensers for the purpose of removing waste heat, passed through a cooling device for the purpose of removing such heat from the water and then passed again, except for blowdown, through the main condenser.
- (i) The term *10 year, 24/hour rainfall event* means a rainfall event with a probable recurrence interval of once in ten years as defined by the National Weather Service in Technical Paper No. 40. *Rainfall Frequency Atlas of the United States*, May 1961 or equivalent regional rainfall probability information developed therefrom.
- (j) The term *blowdown* means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices.
- (k) The term *average concentration* as it relates to chlorine discharge means the average of analyses made over a single period of chlorine release which does not exceed two hours.
- (l) The term *free available chlorine* means the value obtained using any of the "chlorine - free available" methods in Table IB in 40 CFR 136.3(a) where the method has the capability of measuring free available chlorine, or other methods approved by the permitting authority.
- (m) The term *coal pile runoff* means the rainfall runoff from or through any coal storage pile.
- (n) The term *flue gas desulfurization (FGD) wastewater* means any wastewater generated specifically from the wet flue gas desulfurization scrubber system that comes into contact with the flue gas or the FGD solids, including but not limited to, the blowdown from the FGD scrubber system, overflow or underflow from the solids separation process, FGD solids wash water, and the filtrate from the solids dewatering process. Wastewater generated from cleaning the FGD scrubber, cleaning FGD solids separation equipment, cleaning FGD solids dewatering equipment, FGD paste equipment cleaning water, treated FGD wastewater permeate or distillate used as boiler makeup water, or water that is collected in floor drains in the FGD process area is not considered FGD wastewater.
- (o) The term *flue gas mercury control wastewater* means any wastewater generated from an air pollution control system installed or operated for the purpose of removing mercury from flue gas. This includes fly ash collection systems when the particulate control system follows sorbent injection or other controls to remove mercury from flue gas. FGD wastewater generated at plants using oxidizing agents to remove mercury in the FGD system and not in a separate FGMC system is not included in this definition.
- (p) The term *transport water* means any wastewater that is used to convey fly ash, bottom ash, or economizer ash from the ash collection or storage equipment, or boiler, and has direct contact with the ash. Transport water does not include low volume, short duration discharges of wastewater from minor leaks (e.g., leaks from valve packing, pipe flanges, or piping), minor maintenance events (e.g., replacement of valves or pipe sections), FGD paste equipment cleaning water, or bottom ash purge water.

- (q) The term gasification wastewater means any wastewater generated at an integrated gasification combined cycle operation from the gasifier or the syngas cleaning, combustion, and cooling processes. Gasification wastewater includes, but is not limited to the following: Sour/grey water; CO<sub>2</sub>/steam stripper wastewater; sulfur recovery unit blowdown, and wastewater resulting from slag handling or fly ash handling, particulate removal, halogen removal, or trace organic removal. Air separation unit blowdown, noncontact cooling water, and runoff from fuel and/or byproduct piles are not considered gasification wastewater. Wastewater that is collected intermittently in floor drains in the gasification process area from leaks, spills, and cleaning occurring during normal operation of the gasification operation is not considered gasification wastewater.
- (r) The term combustion residual leachate means leachate from landfills or surface impoundments containing combustion residuals. Leachate is composed of liquid, including any suspended or dissolved constituents in the liquid, that has percolated through waste or other materials emplaced in a landfill, or that passes through the surface impoundment's containment structure (e.g., bottom, dikes, berms). Combustion residual leachate includes seepage and/or leakage from a combustion residual landfill or impoundment unit. Combustion residual leachate includes wastewater from landfills and surface impoundments located on non-adjointing property when under the operational control of the permitted facility.
- (s) The term oil-fired unit means a generating unit that uses oil as the primary or secondary fuel source and does not use a gasification process or any coal or petroleum coke as a fuel source. This definition does not include units that use oil only for start up or flame-stabilization purposes.
- (t) The phrase "as soon as possible" means November 1, 2018 (except for purposes of § 423.13(g)(1)(i) and (k)(1)(i), in which case it means October 13, 2021), unless the permitting authority establishes a later date, after receiving site-relevant information from the discharger, which reflects a consideration of the following factors:
  - (1) Time to expeditiously plan (including to raise capital), design, procure, and install equipment to comply with the requirements of this part.
  - (2) Changes being made or planned at the plant in response to:
    - (i) New source performance standards for greenhouse gases from new fossil fuel-fired electric generating units, under sections 111, 301, 302, and 307(d)(1)(C) of the Clean Air Act, as amended, 42 U.S.C. 7411, 7601, 7602, 7607(d)(1)(C);
    - (ii) Emission guidelines for greenhouse gases from existing fossil fuel-fired electric generating units, under sections 111, 301, 302, and 307(d) of the Clean Air Act, as amended, 42 U.S.C. 7411, 7601, 7602, 7607(d); or
    - (iii) Regulations that address the disposal of coal combustion residuals as solid waste, under sections 1006(b), 1008(a), 2002(a), 3001, 4004, and 4005(a) of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. 6906(b), 6907(a), 6912(a), 6944, and 6945(a).
  - (3) For FGD wastewater requirements only, an initial commissioning period for the treatment system to optimize the installed equipment.
  - (4) Other factors as appropriate.
- (u) The term "FGD paste" means any combination of FGD wastewater treated with fly ash, lime, Portland cement, and/or other pozzolanic material prior to being landfilled, and which is engineered to form a solid through pozzolanic reactions.
- (v) The term "FGD paste equipment cleaning water" means any wastewater generated from the cleaning of pugmills, piping, or other equipment used to make, process, or transport FGD paste from its point of generation to a landfill.
- (w) The term "permanent cessation of coal combustion" means the owner or operator certifies under § 423.19(f) that an electric generating unit will cease combustion of coal no later than December 31, 2028.
- (x) The term "high FGD flow" means the maximum daily volume of FGD wastewater that could be discharged by a facility is above 4 million gallons per day after accounting for that facility's ability to recycle the wastewater to the maximum limits for the FGD system materials of construction.
- (y) The term "capacity utilization rating" means the total MWh production of an electric generating unit over a calendar year divided by the product of the number of hours in that year times the nameplate capacity.
- (z) The term "low utilization electric generating unit" means any electric generating unit for which the facility owner certifies, and annually recertifies, under § 423.19(e) that the two-year average annual capacity utilization rating is less than 10 percent.

- (aa) The term "primary active wetted bottom ash system volume" means the maximum volumetric capacity of bottom ash transport water in all non-redundant piping (including recirculation piping) and primary bottom ash collection and recirculation loop tanks (e.g., bins, troughs, clarifiers, and hoppers) of a wet bottom ash system, excluding the volumes of surface impoundments, secondary bottom ash system equipment (e.g., installed spares, redundancies, and maintenance tanks), and non-bottom ash transport systems that may direct process water to the bottom ash.
- (bb) The term "tank" means a stationary device, designed to contain an accumulation of wastewater which is constructed primarily of non-earthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.
- (cc) The term "bottom ash purge water" means any water being discharged subject to § 423.13(k)(2)(i) or 423.16(g)(2)(i).
- (dd) The term "30-day rolling average" means the series of averages using the measured values of the preceding 30 days for each average in the series.

[47 FR 52304, Nov. 19, 1982, as amended at 77 FR 29834, May 18, 2012; 80 FR 67893, Nov. 3, 2015; 82 FR 43500, Sept. 18, 2017; 85 FR 64716, Oct. 13, 2020]

**§ 423.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).**

- (a) In establishing the limitations set forth in this section, EPA took into account all information it was able to collect, develop and solicit with respect to factors (such as age and size of plant, utilization of facilities, raw materials, manufacturing processes, non-water quality environmental impacts, control and treatment technology available, energy requirements and costs) which can affect the industry subcategorization and effluent levels established. It is, however, possible that data which would affect these limitations have not been available and, as a result, these limitations should be adjusted for certain plants in this industry. An individual discharger or other interested person may submit evidence to the Regional Administrator (or to the State, if the State has the authority to issue NPDES permits) that factors relating to the equipment or facilities involved, the process applied, or other such factors related to such discharger are fundamentally different from the factors considered in the establishment of the guidelines. On the basis of such evidence or other available information, the Regional Administrator (or the State) will make a written finding that such factors are or are not fundamentally different for that facility compared to those specified in the Development Document. If such fundamentally different factors are found to exist, the Regional Administrator or the State shall establish for the discharger effluent limitations in the NPDES Permit either more or less stringent than the limitations established herein, to the extent dictated by such fundamentally different factors. Such limitations must be approved by the Administrator of the Environmental Protection Agency. The Administrator may approve or disapprove such limitations, specify other limitations, or initiate proceedings to revise these regulations. The phrase "other such factors" appearing above may include significant cost differentials. In no event may a discharger's impact on receiving water quality be considered as a factor under this paragraph.
- (b) Any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction by the application of the best practicable control technology currently available (BPT):
  - (1) The pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0.
  - (2) There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
  - (3) The quantity of pollutants discharged from low volume waste sources shall not exceed the quantity determined by multiplying the flow of low volume waste sources times the concentration listed in the following table:

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0

- (4) The quantity of pollutants discharged in fly ash and bottom ash transport water shall not exceed the quantity determined by multiplying the flow of fly ash and bottom ash transport water times the concentration listed in the following table:

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0

- (5) The quantity of pollutants discharged in metal cleaning wastes shall not exceed the quantity determined by multiplying the flow of metal cleaning wastes times the concentration listed in the following table:

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0
Copper, total	1.0	1.0
Iron, total	1.0	1.0

- (6) The quantity of pollutants discharged in once through cooling water shall not exceed the quantity determined by multiplying the flow of once through cooling water sources times the concentration listed in the following table:

Pollutant or pollutant property	BPT effluent limitations	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

- (7) The quantity of pollutants discharged in cooling tower blowdown shall not exceed the quantity determined by multiplying the flow of cooling tower blowdown sources times the concentration listed in the following table:

Pollutant or pollutant property	BPT effluent limitations	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

- (8) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or State, if the State has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level or chlorination.
- (9) Subject to the provisions of paragraph (b)(10) of this section, the following effluent limitations shall apply to the point source discharges of coal pile runoff:

Pollutant or pollutant property	BPT effluent limitations
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Pollutant or pollutant property	BAT effluent limitations
	Maximum concentration for any time (mg/l)
TSS	50

- (10) Any untreated overflow from facilities designed, constructed, and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event shall not be subject to the limitations in paragraph (b)(9) of this section.
- (11) The quantity of pollutants discharged in FGD wastewater, flue gas mercury control wastewater, combustion residual leachate, gasification wastewater, or bottom ash purge water shall not exceed the quantity determined by multiplying the flow of the applicable wastewater times the concentration listed in the table 7:

Table 7 to Paragraph (b)(11)

Pollutant or pollutant property	BPT effluent limitations	
	Maximum for any 1 day (mg/L)	Average of daily values for 30 consecutive days shall not exceed (mg/L)
TSS	100.0	30.0
Oil and grease	20.0	15.0

- (12) At the permitting authority's discretion, the quantity of pollutant allowed to be discharged may be expressed as a concentration limitation instead of the mass-based limitations specified in paragraphs (b)(3) through (b)(7), and (b)(11), of this section. Concentration limitations shall be those concentrations specified in this section.
- (13) In the event that wastestreams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled in paragraphs (b)(1) through (b)(12) of this section attributable to each controlled waste source shall not exceed the specified limitations for that waste source.

*(The information collection requirements contained in paragraph (a) were approved by the Office of Management and Budget under control number 2000-0194)*

*[47 FR 52304, Nov. 19, 1982, as amended at 48 FR 31404, July 8, 1983; 80 FR 67894, Nov. 3, 2015; 85 FR 64716, Oct. 13, 2020]*

### **§ 423.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).**

Except as provided in 40 CFR 125.30 through 125.32, any existing point source subject to this part must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).

- (a) There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
- (b)
- (1) For any plant with a total rated electric generating capacity of 25 or more megawatts, the quantity of pollutants discharged in once through cooling water from each discharge point shall not exceed the quantity determined by multiplying the flow of once through cooling water from each discharge point times the concentration listed in the

following table:

Pollutant or pollutant property	BAT Effluent Limitations
	Maximum concentration (mg/l)
Total residual chlorine	0.20

- (2) Total residual chlorine may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.

(c)

- (1) For any plant with a total rated generating capacity of less than 25 megawatts, the quantity of pollutants discharged in once through cooling water shall not exceed the quantity determined by multiplying the flow of once through cooling water sources times the concentration listed in the following table:

Pollutant or pollutant property	BAT effluent limitations	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

- (2) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or State, if the State has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.

(d)

- (1) The quantity of pollutants discharged in cooling tower blowdown shall not exceed the quantity determined by multiplying the flow of cooling tower blowdown times the concentration listed below:

Pollutant or pollutant property	BAT effluent limitations	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

Pollutant or pollutant property	Maximum for any 1 day –(mg/l)	Average of daily values for 30 consecutive days shall not exceed = (mg/l)
The 126 priority pollutants (Appendix A) contained in chemicals added for cooling tower maintenance, except:	( <sup>1</sup> )	( <sup>1</sup> )
Chromium, total	0.2	0.2
Zinc, total	1.0	1.0

<sup>1</sup> No detectable amount.

- (2) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or State, if the State has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.
- (3) At the permitting authority's discretion, instead of the monitoring specified in 40 CFR 122.11(b) compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.
- (e) The quantity of pollutants discharged in chemical metal cleaning wastes shall not exceed the quantity determined by multiplying the flow of chemical metal cleaning wastes times the concentration listed in the following table:

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed –(mg/l)
Copper, total	1.0	1.0
Iron, total	1.0	1.0

(f) [Reserved - Nonchemical Metal Cleaning Wastes].

(g)

(1)

- (i) **FGD wastewater.** Except for those discharges to which paragraph (g)(2) or (g)(3) of this section applies, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the table 1 following this paragraph (g)(1)(i). Dischargers must meet the effluent limitations for FGD wastewater in this paragraph by a date determined by the permitting authority that is as soon as possible beginning October 13, 2021, but no later than December 31, 2025. These effluent limitations apply to the discharge of FGD wastewater generated on and after the date determined by the permitting authority for meeting the effluent limitations, as specified in this paragraph.

Table 5 to Paragraph (g)(1)(i)

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	18	8
Mercury, total (ng/L)	103	34
Selenium, total (ug/L)	70	29
Nitrate/nitrite as N (mg/L)	4	3

- (ii) For FGD wastewater generated before the date determined by the permitting authority, as specified in paragraph (g)(1)(i), the quantity of pollutants discharged in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed for TSS in § 423.12(b) (11).



(2)

- (i) For any electric generating unit with a total nameplate capacity of less than or equal to 50 megawatts, that is an oil-fired unit, or for which the owner has submitted a certification pursuant to § 423.19(f), the quantity of pollutants discharged in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed for TSS in § 423.12(b)(11).
- (ii) For FGD wastewater discharges from a high FGD flow facility, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the table following this paragraph (g)(2)(ii). Dischargers must meet the effluent limitations for FGD wastewater in this paragraph by a date determined by the permitting authority that is as soon as possible beginning October 13, 2021, but no later than December 31, 2023. These effluent limitations apply to the discharge of FGD wastewater generated on and after the date determined by the permitting authority for meeting the effluent limitations, as specified in this paragraph.

Table 6 to Paragraph (g)(2)(ii)

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	11	8
Mercury, total (ng/L)	788	356

- (iii) For FGD wastewater discharges from a low utilization electric generating unit, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the table following paragraph (g)(2)(ii). Dischargers must meet the effluent limitations for FGD wastewater in this paragraph by a date determined by the permitting authority that is as soon as possible beginning October 13, 2021, but no later than December 31, 2023. These effluent limitations apply to the discharge of FGD wastewater generated on and after the date determined by the permitting authority for meeting the effluent limitations, as specified in this paragraph.

(3)

- (i) For dischargers who voluntarily choose to meet the effluent limitations for FGD wastewater in this paragraph, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the table following this paragraph (g)(3)(i). Dischargers who choose to meet the effluent limitations for FGD wastewater in this paragraph must meet such limitations by December 31, 2028. These effluent limitations apply to the discharge of FGD wastewater generated on and after December 31, 2028.

Table 7 of Paragraph (g)(3)(i)

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	5	NA

Pollutant or pollutant property	BAT effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Mercury, total (ng/L)	23	10
Selenium, total (ug/L)	10	NA
Nitrate/Nitrite (mg/L)	2.0	1.2
Bromide (mg/L)	0.2	NA
TDS (mg/L)	306	149

- (ii) For discharges of FGD wastewater generated before December 31, 2023, the quantity of pollutants discharged in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed for TSS in § 423.12(b)(11).

(h)

(1)

- (i) **Fly ash transport water.** Except for those discharges to which paragraph (h)(2) of this section applies, or when the fly ash transport water is used in the FGD scrubber, there shall be no discharge of pollutants in fly ash transport water. Dischargers must meet the discharge limitation in this paragraph by a date determined by the permitting authority that is as soon as possible beginning November 1, 2018, but no later than December 31, 2023. This limitation applies to the discharge of fly ash transport water generated on and after the date determined by the permitting authority for meeting the discharge limitation, as specified in this paragraph. Whenever fly ash transport water is used in any other plant process or is sent to a treatment system at the plant (except when it is used in the FGD scrubber), the resulting effluent must comply with the discharge limitation in this paragraph. When the fly ash transport water is used in the FGD scrubber, the quantity of pollutants in fly ash transport water shall not exceed the quantity determined by multiplying the flow of fly ash transport water times the concentration listed in the table in paragraph (g)(1)(i) of this section.
- (ii) For discharges of fly ash transport water generated before the date determined by the permitting authority, as specified in paragraph (h)(1)(i) of this section, the quantity of pollutants discharged in fly ash transport water shall not exceed the quantity determined by multiplying the flow of fly ash transport water times the concentration listed for TSS in § 423.12(b)(4).

- (2) For any electric generating unit with a total nameplate generating capacity of less than or equal to 50 megawatts or that is an oil-fired unit, the quantity of pollutants discharged in fly ash transport water shall not exceed the quantity determined by multiplying the flow of fly ash transport water times the concentration listed for TSS in § 423.12(b)(4).

(i)

(1)

- (i) **Flue gas mercury control wastewater.** Except for those discharges to which paragraph (i)(2) of this section applies, there shall be no discharge of pollutants in flue gas mercury control wastewater. Dischargers must meet the discharge limitation in this paragraph by a date determined by the permitting authority that is as soon as possible beginning November 1, 2018, but no later than December 31, 2023. This limitation applies to the discharge of flue gas mercury control wastewater generated on and after the date determined by the permitting authority for meeting the discharge limitation, as specified in this paragraph. Whenever flue gas mercury control wastewater is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge limitation in this paragraph.
- (ii) For discharges of flue gas mercury control wastewater generated before the date determined by the permitting authority, as specified in paragraph (i)(1)(i) of this section, the quantity of pollutants discharged in flue gas mercury control wastewater shall not exceed the quantity determined by multiplying the flow of flue gas

mercury control wastewater times the concentration for TSS listed in § 423.12(b)(11).

- (2) For any electric generating unit with a total nameplate generating capacity of less than or equal to 50 megawatts or that is an oil-fired unit, the quantity of pollutants discharged in flue gas mercury control wastewater shall not exceed the quantity determined by multiplying the flow of flue gas mercury control wastewater times the concentration for TSS listed in § 423.12(b)(11).

(j)

(1)

- (i) **Gasification wastewater.** Except for those discharges to which paragraph (j)(2) of this section applies, the quantity of pollutants in gasification wastewater shall not exceed the quantity determined by multiplying the flow of gasification wastewater times the concentration listed in the table following this paragraph (j)(1)(i). Dischargers must meet the effluent limitations in this paragraph by a date determined by the permitting authority that is as soon as possible beginning November 1, 2018, but no later than December 31, 2023. These effluent limitations apply to the discharge of gasification wastewater generated on and after the date determined by the permitting authority for meeting the effluent limitations, as specified in this paragraph.

Pollutant or pollutant property	BAT Effluent limitations	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	4	
Mercury, total (ng/L)	1.8	1.3
Selenium, total (ug/L)	453	227
Total dissolved solids (mg/L)	38	22

- (ii) For discharges of gasification wastewater generated before the date determined by the permitting authority, as specified in paragraph (j)(1)(i) of this section, the quantity of pollutants discharged in gasification wastewater shall not exceed the quantity determined by multiplying the flow of gasification wastewater times the concentration for TSS listed in § 423.12(b)(11).
- (2) For any electric generating unit with a total nameplate generating capacity of less than or equal to 50 megawatts or that is an oil-fired unit, the quantity of pollutants discharged in gasification wastewater shall not exceed the quantity determined by multiplying the flow of gasification wastewater times the concentration listed for TSS in § 423.12(b)(11).

(k)

(1)

- (i) **Bottom ash transport water.** Except for those discharges to which paragraph (k)(2) of this section applies, or when the bottom ash transport water is used in the FGD scrubber, there shall be no discharge of pollutants in bottom ash transport water. Dischargers must meet the discharge limitation in this paragraph by a date determined by the permitting authority that is as soon as possible beginning October 13, 2021, but no later than December 31, 2025. This limitation applies to the discharge of bottom ash transport water generated on and after the date determined by the permitting authority for meeting the discharge limitation, as specified in this paragraph. Except for those discharges to which paragraph (k)(2) of this section applies, whenever bottom ash transport water is used in any other plant process or is sent to a treatment system at the plant (except when it is used in the FGD scrubber), the resulting effluent must comply with the discharge limitation in this paragraph. When the bottom ash transport water is used in the FGD scrubber, it ceases to be bottom ash transport water, and instead is FGD wastewater, which must meet the requirements in paragraph (g) of this section.

- (ii) For discharges of bottom ash transport water generated before the date determined by the permitting authority, as specified in paragraph (k)(1)(i) of this section, the quantity of pollutants discharged in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of bottom ash transport water times the concentration for TSS listed in § 423.12(b)(4).
- (2)
  - (i)
    - (A) The discharge of pollutants in bottom ash transport water from a properly installed, operated, and maintained bottom ash system is authorized under the following conditions:
      - (1) To maintain system water balance when precipitation-related inflows are generated from storm events exceeding a 10-year storm event of 24-hour or longer duration (e.g., 30-day storm event) and cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment; or
      - (2) To maintain system water balance when regular inflows from wastestreams other than bottom ash transport water exceed the ability of the bottom ash system to accept recycled water and segregating these other wastestreams is not feasible; or
      - (3) To maintain system water chemistry where installed equipment at the facility is unable to manage pH, corrosive substances, substances or conditions causing scaling, or fine particulates to below levels which impact system operation or maintenance; or
      - (4) To conduct maintenance not otherwise included in paragraphs (k)(2)(i)(A) (1), (2), or (3) of this section and not exempted from the definition of transport water in § 423.11(p), and when water volumes cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment.
    - (B) The total volume that may be discharged for the above activities shall be reduced or eliminated to the extent achievable using control measures (including best management practices) that are technologically available and economically achievable in light of best industry practice. The total volume of the discharge authorized in this subsection shall be determined on a case-by-case basis by the permitting authority and in no event shall such discharge exceed a 30-day rolling average of ten percent of the primary active wetted bottom ash system volume. The volume of daily discharges used to calculate the 30-day rolling average shall be calculated using measurements from flow monitors.
  - (ii) For any electric generating unit with a total nameplate generating capacity of less than or equal to 50 megawatts, that is an oil-fired unit, or for which the owner has certified to the permitting authority that it will cease combustion of coal pursuant to § 423.19(f), the quantity of pollutants discharged in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of the applicable wastewater times the concentration for TSS listed in § 423.12(b)(4).
  - (iii) For bottom ash transport water generated by a low utilization electric generating unit, the quantity of pollutants discharged in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of the applicable wastewater times the concentration for TSS listed in § 423.12(b)(4), and shall incorporate the elements of a best management practices plan as described in (k)(3) of this section.
- (3) Where required in paragraph (k)(2)(iii) of this section, the discharger shall prepare, implement, review, and update a best management practices plan for the recycle of bottom ash transport water, and must include:
  - (i) Identification of the low utilization coal-fired generating units that contribute bottom ash to the bottom ash transport system.
  - (ii) A description of the existing bottom ash handling system and a list of system components (e.g., remote mechanical drag system, tanks, impoundments, chemical addition). Where multiple generating units share a bottom ash transport system, the plan shall specify which components are associated with low utilization generating units.
  - (iii) A detailed water balance, based on measurements, or estimates where measurements are not feasible, specifying the volume and frequency of water additions and removals from the bottom ash transport system, including:
    - (A) Water removed from the BA transport system:
      - (1) To the discharge outfall.

- (2) To the FGD scrubber system.
  - (3) Through evaporation
  - (4) Entrained with any removed ash
  - (5) To any other mechanisms not specified above.
- (B) Water entering or recycled to the BA transport system:
  - (1) Makeup water added to the BA transport water system.
  - (2) Bottom ash transport water recycled back to the system in lieu of makeup water.
  - (3) Any other mechanisms not specified above.
- (iv) Measures to be employed by all facilities:
  - (A) Implementation of a comprehensive preventive maintenance program to identify, repair and replace equipment prior to failures that result in the release of bottom ash transport water.
  - (B) Daily or more frequent inspections of the entire bottom ash transport water system, including valves, pipe flanges and piping, to identify leaks, spills and other unintended bottom ash transport water escaping from the system, and timely repair of such conditions.
  - (C) Documentation of preventive and corrective maintenance performed.
- (v) Evaluation of options and feasibility, accounting for the associated costs, for eliminating or minimizing discharges of bottom ash transport water, including:
  - (A) Segregation of bottom ash transport water from other process water.
  - (B) Minimization of the introduction of stormwater by diverting (e.g., curbing, using covers) storm water to a segregated collection system.
  - (C) Recycling bottom ash transport water back to the bottom ash transport water system.
  - (D) Recycling bottom ash transport water for use in the FGD scrubber.
  - (E) Optimization of existing equipment (e.g., pumps, pipes, tanks) and installing new equipment where practicable to achieve the maximum amount of recycle.
  - (F) Utilization of "in-line" treatment of transport water (e.g., pH control, fines removal) where needed to facilitate recycle.
- (vi) Description of the bottom ash recycle system, including all technologies, measures, and practices that will be used to minimize discharge.
- (vii) A schedule showing the sequence of implementing any changes necessary to achieve the minimized discharge of bottom ash transport water, including the following:
  - (A) The anticipated initiation and completion dates of construction and installation associated with the technology components or process modifications specified in the plan.
  - (B) The anticipated dates that the discharger expects the technologies and process modifications to be fully implemented on a full-scale basis, which in no case shall be later than December 31, 2023.
  - (C) The anticipated change in discharge volume and effluent quality associated with implementation of the plan.
- (viii) Description establishing a method for documenting and demonstrating to the permitting/control authority that the recycle system is well operated and maintained.
- (ix) Performance of weekly flow monitoring for the following:
  - (A) Make up water to the bottom ash transport water system.
  - (B) Bottom ash transport water sluice flow rate (e.g., to the surface impoundment(s), dewatering bins(s), tank(s), remote mechanical drag system).
  - (C) Bottom ash transport water discharge to surface water or POTW.
  - (D) Bottom ash transport water recycle back to the bottom ash system or FGD scrubber.

- (l) **Combustion residual leachate.** The quantity of pollutants discharged in combustion residual leachate shall not exceed the quantity determined by multiplying the flow of combustion residual leachate times the concentration for TSS listed in § 423.12(b)(11).
- (m) At the permitting authority's discretion, the quantity of pollutant allowed to be discharged may be expressed as a concentration limitation instead of any mass based limitations specified in paragraphs (b) through (l) of this section. Concentration limitations shall be those concentrations specified in this section.
- (n) In the event that wastestreams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled in paragraphs (a) through (m) of this section attributable to each controlled waste source shall not exceed the specified limitation for that waste source.
- (o)
  - (1) Transfer between applicable limitations in a permit. Where, in the permit, the permitting authority has included alternative limits subject to eligibility requirements, upon timely notification to the permitting authority under § 423.19(i), a facility can become subject to the alternative limits under the following circumstances:
    - (i) On or before December 31, 2023 a facility may convert:
      - (A) From limitations for electric generating units permanently ceasing coal combustion under paragraphs (g)(2)(i) or (k)(2)(ii) of this section to limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section; or
      - (B) From voluntary incentives program limitations under paragraph (g)(3)(i) of this section or generally applicable limitations under paragraph (k)(1)(i) of this section to limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section.
    - (ii) On or before December 31, 2025 a facility may convert
      - (A) From voluntary incentives program limitations under paragraph (g)(3)(i) of this section to limitations for electric generating units permanently ceasing coal combustion under paragraph (g)(2)(i) of this section; or
      - (B) From limitations for electric generating units permanently ceasing coal combustion under paragraphs (g)(2)(i) or (k)(2)(ii) of this section to voluntary incentives program limitations under paragraphs (g)(3)(i) of this section or generally applicable limitations under (k)(1)(i) of this section; or
      - (C) From limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section to generally applicable limitations under paragraphs (g)(1)(i) or (k)(1)(i) of this section; or
      - (D) From limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section to voluntary incentives program limitations under paragraphs (g)(3)(i) of this section or generally applicable limitations under paragraph (k)(1)(i) of this section; or
      - (E) From limitations for low utilization electric generating units under paragraphs (g)(2)(iii) or (k)(2)(iii) of this section to limitations for electric generating units permanently ceasing coal combustion under paragraphs (g)(2)(i) and (k)(2)(ii) of this section.
  - (2) A facility must be in compliance with all of its currently applicable requirements to be eligible to file a notice under § 423.19(i) and to become subject to a different set of applicable requirements under paragraph (o)(1) of this section.
  - (3) Where a facility seeking a transfer under paragraph (o)(1)(ii) of this section is currently subject to more stringent limitations than the limitations being sought, the facility must continue to meet those more stringent limitations.

*(The information collection requirements contained in paragraphs (c)(2) and (d)(2) were approved by the Office of Management and Budget under control number 2040-0040. The information collection requirements contained in paragraph (d)(3) were approved under control number 2040-0033)*

*[47 FR 52304, Nov. 19, 1982, as amended at 48 FR 31404, July 8, 1983; 80 FR 67894, Nov. 3, 2015; 82 FR 43500, Sept. 18, 2017; 85 FR 64716, Oct. 13, 2020]*

**§ 423.14 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT). [Reserved]**

**§ 423.15 New source performance standards (NSPS).**

- (a) **1982 NSPS.** Any new source as of November 19, 1982, subject to paragraph (a) of this section, must achieve the following new source performance standards, in addition to the limitations in § 423.13 of this part, established on November 3, 2015. In the case of conflict, the more stringent requirements apply:
- (1) **pH.** The pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0.
  - (2) **PCBs.** There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
  - (3) **Low volume waste sources, FGD wastewater, flue gas mercury control wastewater, combustion residual leachate, and gasification wastewater.** The quantity of pollutants discharged in low volume waste sources, FGD wastewater, flue gas mercury control wastewater, combustion residual leachate, and gasification wastewater shall not exceed the quantity determined by multiplying the flow of low volume waste sources times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0

- (4) **Chemical metal cleaning wastes.** The quantity of pollutants discharged in chemical metal cleaning wastes shall not exceed the quantity determined by multiplying the flow of chemical metal cleaning wastes times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0
Copper, total	1.0	1.0
Iron, total	1.0	1.0

- (5) [Reserved]
- (6) **Bottom ash transport water.** The quantity of pollutants discharged in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of the bottom ash transport water times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0

(7) **Fly ash transport water.** There shall be no discharge of pollutants in fly ash transport water.

(8)

- (i) **Once through cooling water.** For any plant with a total rated electric generating capacity of 25 or more megawatts, the quantity of pollutants discharged in once through cooling water from each discharge point shall not exceed the quantity determined by multiplying the flow of once through cooling water from each discharge point times the concentration listed in the following table:

Pollutant or pollutant property	NSPS
	Maximum concentrations (mg/l)
Total residual chlorine	0.20

- (ii) Total residual chlorine may only be discharged from any single generating unit for more than two hours per day when the discharger demonstrates to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.

(9)

- (i) **Once through cooling water.** For any plant with a total rated generating capacity of less than 25 megawatts, the quantity of pollutants discharged in once through cooling water shall not exceed the quantity determined by multiplying the flow of once through cooling water sources times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

- (ii) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or state, if the state has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.

(10)



- (i) **Cooling tower blowdown.** The quantity of pollutants discharged in cooling tower blowdown shall not exceed the quantity determined by multiplying the flow of cooling tower blowdown times the concentration listed below:

Pollutant or pollutant property	NSPS	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
The 126 priority pollutants (appendix A) contained in chemicals added for cooling tower maintenance, except:	( <sup>1</sup> )	( <sup>1</sup> )
Chromium, total	0.2	0.2
zinc, total	1.0	1.0

<sup>1</sup> No detectable amount.

- (ii) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or state, if the state has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.
- (iii) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the standards for the 126 priority pollutants in paragraph (a)(10)(i) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.
- (11) **Coal pile runoff.** Subject to the provisions of paragraph (a)(12) of this section, the quantity or quality of pollutants or pollutant parameters discharged in coal pile runoff shall not exceed the standards specified below:

Pollutant or pollutant property	NSPS for any time
TSS	not to exceed 50 mg/l.

- (12) **Coal pile runoff.** Any untreated overflow from facilities designed, constructed, and operated to treat the coal pile runoff which results from a 10 year, 24 hour rainfall event shall not be subject to the standards in paragraph (a)(11) of this section.

- (13) At the permitting authority's discretion, the quantity of pollutant allowed to be discharged may be expressed as a concentration limitation instead of any mass based limitations specified in paragraphs (a)(3) through (10) of this section. Concentration limits shall be based on the concentrations specified in this section.
- (14) In the event that wastestreams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled in paragraphs (a)(1) through (13) of this section attributable to each controlled waste source shall not exceed the specified limitation for that waste source.
- (b) **2015 NSPS.** Any new source as of November 17, 2015, subject to paragraph (b) of this section, must achieve the following new source performance standards:
- (1) **pH.** The pH of all discharges, except once through cooling water, shall be within the range of 6.0-9.0.
  - (2) **PCBs.** There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
  - (3) **Low volume waste sources.** The quantity of pollutants discharged from low volume waste sources shall not exceed the quantity determined by multiplying the flow of low volume waste sources times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0

- (4) **Chemical metal cleaning wastes.** The quantity of pollutants discharged in chemical metal cleaning wastes shall not exceed the quantity determined by multiplying the flow of chemical metal cleaning wastes times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
TSS	100.0	30.0
Oil and grease	20.0	15.0
Copper, total	1.0	1.0
Iron, total	1.0	1.0

- (5) [Reserved]
- (6) **Bottom ash transport water.** There shall be no discharge of pollutants in bottom ash transport water. Whenever bottom ash transport water is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge standard in this paragraph.

- (7) **Fly ash transport water.** There shall be no discharge of pollutants in fly ash transport water. Whenever fly ash transport water is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge standard in this paragraph.
- (8)
- (i) **Once through cooling water.** For any plant with a total rated electric generating capacity of 25 or more megawatts, the quantity of pollutants discharged in once through cooling water from each discharge point shall not exceed the quantity determined by multiplying the flow of once through cooling water from each discharge point times the concentration listed in the following table:

Pollutant or pollutant property	NSPS
	Maximum concentration (mg/l)
Total residual chlorine	0.20

- (ii) Total residual chlorine may only be discharged from any single generating unit for more than two hours per day when the discharger demonstrates to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination is permitted.
- (9)
- (i) **Once through cooling water.** For any plant with a total rated generating capacity of less than 25 megawatts, the quantity of pollutants discharged in once through cooling water shall not exceed the quantity determined by multiplying the flow of once through cooling water sources times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

- (ii) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or state, if the state has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.
- (10)
- (i) **Cooling tower blowdown.** The quantity of pollutants discharged in cooling tower blowdown shall not exceed the quantity determined by multiplying the flow of cooling tower blowdown times the concentration listed below:

Pollutant or pollutant property	NSPS	
	Maximum concentration (mg/l)	Average concentration (mg/l)
Free available chlorine	0.5	0.2

Pollutant or pollutant property	NSPS

	Maximum for any 1 day (mg/l)	Average of daily values for 30 consecutive days shall not exceed (mg/l)
The 126 priority pollutants (appendix A) contained in chemicals added for cooling tower maintenance, except:	( <sup>1</sup> )	( <sup>1</sup> )
Chromium, total	0.2	0.2
zinc, total	1.0	1.0

<sup>1</sup> No detectable amount.

- (ii) Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the Regional Administrator or state, if the state has NPDES permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.
  - (iii) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the standards for the 126 priority pollutants in paragraph (b)(10)(i) of this section may be determined by engineering calculations demonstrating that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.
- (11) **Coal pile runoff.** Subject to the provisions of paragraph (b)(12) of this section, the quantity or quality of pollutants or pollutant parameters discharged in coal pile runoff shall not exceed the standards specified below:

Pollutant or pollutant property	NSPS for any time
TSS	not to exceed 50 mg/l.

- (12) **Coal pile runoff.** Any untreated overflow from facilities designed, constructed, and operated to treat the coal pile runoff which results from a 10 year, 24 hour rainfall event shall not be subject to the standards in paragraph (b)(11) of this section.
- (13) **FGD wastewater.** The quantity of pollutants discharged in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	4	
Mercury, total (ng/L)	39	24
Selenium, total (ug/L)	5	

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
TDS (mg/L)	50	24

- (14) **Flue gas mercury control wastewater.** There shall be no discharge of pollutants in flue gas mercury control wastewater. Whenever flue gas mercury control wastewater is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge standard in this paragraph.
- (15) **Gasification wastewater.** The quantity of pollutants discharged in gasification wastewater shall not exceed the quantity determined by multiplying the flow of gasification wastewater times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	4	
Mercury, total (ng/L)	1.8	1.3
Selenium, total (ug/L)	453	227
Total dissolved solids (mg/L)	38	22

- (16) **Combustion residual leachate.** The quantity of pollutants discharged in combustion residual leachate shall not exceed the quantity determined by multiplying the flow of combustion residual leachate times the concentration listed in the following table:

Pollutant or pollutant property	NSPS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	11	8
Mercury, total (ng/L)	788	356

- (17) At the permitting authority's discretion, the quantity of pollutant allowed to be discharged may be expressed as a concentration limitation instead of any mass based limitations specified in paragraphs (b)(3) through (16) of this section. Concentration limits shall be based on the concentrations specified in this section.
- (18) In the event that wastestreams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled in paragraphs (b)(1) through (16) of this section attributable to each controlled waste source shall not exceed the specified limitation for that waste source.

(The information collection requirements contained in paragraphs (a)(8)(ii), (a)(9)(ii), and (a)(10)(ii), (b)(8)(ii), (b)(9)(ii), and (b)(10)(ii) were approved by the Office of Management and Budget under control number 2040-0040. The information collection requirements contained in paragraphs (a)(10)(iii) and (b)(10)(iii) were approved under control number 2040-0033.)

[80 FR 67896, Nov. 3, 2015]

### § 423.16 Pretreatment standards for existing sources (PSES).

Except as provided in 40 CFR 403.7 and 403.13, any existing source subject to this subpart which introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and achieve the following pretreatment standards for existing sources (PSES) by July 1, 1984:

- (a) There shall be no discharge of polychlorinated biphenol compounds such as those used for transformer fluid.
- (b) The pollutants discharged in chemical metal cleaning wastes shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSES pretreatment standards
	Maximum for 1 day (mg/l)
Copper, total	1.0

- (c) [Reserved - Nonchemical Metal Cleaning Wastes].

(d)

- (1) The pollutants discharged in cooling tower blowdown shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSES pretreatment standards
	Maximum for any time (mg/l)
The 126 priority pollutants (Appendix A) contained in chemicals added for cooling tower maintenance, except:	( <sup>1</sup> )
Chromium, total	0.2
Zinc, total	1.0

<sup>1</sup> No detectable amount.

- (2) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the limitations for the 126 priority pollutants in paragraph (d)(1) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.

(e)

- (1) **FGD wastewater.** Except as provided for in paragraph (e)(2) of this section, for any electric generating unit with a total nameplate generating capacity of more than 50 megawatts, that is not an oil-fired unit, and that the owner has not certified to the permitting authority that it will cease the coal combustion pursuant to § 423.19(f), the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD

wastewater times the concentration listed in table 3 to this paragraph (e)(1). Dischargers must meet the standards in this paragraph by October 13, 2023 except as provided for in paragraph (e)(2) of this section. These standards apply to the discharge of FGD wastewater generated on and after October 13, 2023.

Table 3 to Paragraph (e)(1)

Pollutant or pollutant property	PSES	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	18	8
Mercury, total (ng/L)	103	34
Selenium, total (ug/L)	70	29
Nitrate/nitrite as N (mg/L)	4	3

(2)

- (i) For FGD wastewater discharges from a low utilization electric generating unit, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the table 4 to paragraph (e)(2)(ii). Dischargers must meet the standards in this paragraph by October 13, 2023.
- (ii) If any low utilization electric generating unit fails to timely recertify that the two year average capacity utilization rating of such a electric generating unit is below 10 percent per year as specified in § 423.19(e), regardless of the reason, within two years from the date such a recertification was required, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the Table 3 to paragraph (e)(1).

Table 4 to Paragraph (e)(2)(ii)

Pollutant or pollutant property	PSES	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	11	8
Mercury, total (ng/L)	788	356

(e)

- (1) **FGD wastewater.** Except as provided for in paragraph (e)(2) of this section, for any electric generating unit with a total nameplate generating capacity of more than 50 megawatts, that is not an oil-fired unit, and that the owner has not certified to the permitting authority that it will cease the coal combustion pursuant to § 423.19(f), the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in table 3 to this paragraph (e)(1). Dischargers must meet the standards in this paragraph by October 13, 2023 except as provided for in paragraph (e)(2) of this section. These standards apply to the discharge of FGD wastewater generated on and after October 13, 2023.

Table 3 to Paragraph (e)(1)

Pollutant or pollutant property	PSES	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	18	8
Mercury, total (ng/L)	103	34
Selenium, total (ug/L)	70	29
Nitrate/nitrite as N (mg/L)	4	3

(2)

- (i) For FGD wastewater discharges from a low utilization electric generating unit, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the table 4 to paragraph (e)(2)(ii). Dischargers must meet the standards in this paragraph by October 13, 2023.
- (ii) If any low utilization electric generating unit fails to timely recertify that the two year average capacity utilization rating of such a electric generating unit is below 10 percent per year as specified in § 423.19(e), regardless of the reason, within two years from the date such a recertification was required, the quantity of pollutants in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the Table 3 to paragraph (e)(1).

Table 4 to Paragraph (e)(2)(ii)

Pollutant or pollutant property	PSES	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (ug/L)	11	8
Mercury, total (ng/L)	788	356

- (f) **Fly ash transport water.** Except when the fly ash transport water is used in the FGD scrubber, for any electric generating unit with a total nameplate generating capacity of more than 50 megawatts and that is not an oil-fired unit, there shall be no discharge of pollutants in fly ash transport water. This standard applies to the discharge of fly ash transport water generated on and after November 1, 2018. Whenever fly ash transport water is used in any other plant process or is sent to a treatment system at the plant (except when it is used in the FGD scrubber), the resulting effluent must comply with the discharge standard in this paragraph. When the fly ash transport water is used in the FGD scrubber, the quantity of pollutants in fly ash transport water shall not exceed the quantity determined by multiplying the flow of fly ash transport water times the concentration listed in the table in paragraph (e) of this section.

(g)

- (1) Except for those discharges to which paragraph (g)(2) applies, or when the bottom ash transport water is used in the FGD scrubber, for any electric generating unit with a total nameplate generating capacity of more than 50 megawatts, that is not an oil-fired unit, that is not a low utilization electric generating unit, and that the owner has not certified to the permitting authority that the electric generating unit will cease the cessation of coal combustion



pursuant to § 423.19(f), there shall be no discharge of pollutants in bottom ash transport water. This standard applies to the discharge of bottom ash transport water generated on and after October 13, 2023. Except for those discharges to which paragraph (g)(2) of this section applies, whenever bottom ash transport water is used in any other plant process or is sent to a treatment system at the plant (except when it is used in the FGD scrubber), the resulting effluent must comply with the discharge standard in this paragraph. When the bottom ash transport water is used in the FGD scrubber, the quantity of pollutants in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of bottom ash transport water times the concentration listed in the table in paragraph (e) of this section.

(2)

- (i) The discharge of pollutants in bottom ash transport water from a properly installed, operated, and maintained bottom ash system is authorized under the following conditions:
  - (A) To maintain system water balance when precipitation-related inflows are generated from a 10-year storm event of 24-hour or longer duration (e.g., 30-day storm event) and cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment; or
  - (B) To maintain system water balance when regular inflows from wastestreams other than bottom ash transport water exceed the ability of the bottom ash system to accept recycled water and segregating these other wastestreams is feasible; or
  - (C) To maintain system water chemistry where current operations at the facility are unable to currently manage pH, corrosive substances, substances or conditions causing scaling, or fine particulates to below levels which impact system operation or maintenance; or
  - (D) To conduct maintenance not otherwise included in paragraphs (g)(2)(i)(A)(1), (2), or (3) of this section and not exempted from the definition of transport water in § 423.11(p), and when water volumes cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment.
- (ii) The total volume that may be discharged to a POTW for the above activities shall be reduced or eliminated to the extent achievable as determined by the control authority. The control authority may also include control measures (including best management practices) that are technologically available and economically achievable in light of best industry practice. In no event shall the total volume of the discharge exceed a 30-day rolling average of ten percent of the primary active wetted bottom ash system volume. The volume of daily discharges used to calculate the 30-day rolling average shall be calculated using measurements from flow monitors.
- (iii) For bottom ash transport water generated by a low utilization electric generating unit, the quantity of pollutants discharged in bottom ash transport water shall incorporate the elements of a best management practices plan as described in § 423.13(k)(3).

(g)

- (1) Except for those discharges to which paragraph (g)(2) applies, or when the bottom ash transport water is used in the FGD scrubber, for any electric generating unit with a total nameplate generating capacity of more than 50 megawatts, that is not an oil-fired unit, that is not a low utilization electric generating unit, and that the owner has not certified to the permitting authority that the electric generating unit will cease the cessation of coal combustion pursuant to § 423.19(f), there shall be no discharge of pollutants in bottom ash transport water. This standard applies to the discharge of bottom ash transport water generated on and after October 13, 2023. Except for those discharges to which paragraph (g)(2) of this section applies, whenever bottom ash transport water is used in any other plant process or is sent to a treatment system at the plant (except when it is used in the FGD scrubber), the resulting effluent must comply with the discharge standard in this paragraph. When the bottom ash transport water is used in the FGD scrubber, the quantity of pollutants in bottom ash transport water shall not exceed the quantity determined by multiplying the flow of bottom ash transport water times the concentration listed in the table in paragraph (e) of this section.

(2)

- (i) The discharge of pollutants in bottom ash transport water from a properly installed, operated, and maintained bottom ash system is authorized under the following conditions:
  - (A) To maintain system water balance when precipitation-related inflows are generated from a 10-year storm event of 24-hour or longer duration (e.g., 30-day storm event) and cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment; or

- (B) To maintain system water balance when regular inflows from wastestreams other than bottom ash transport water exceed the ability of the bottom ash system to accept recycled water and segregating these other wastestreams is feasible; or
  - (C) To maintain system water chemistry where current operations at the facility are unable to currently manage pH, corrosive substances, substances or conditions causing scaling, or fine particulates to below levels which impact system operation or maintenance; or
  - (D) To conduct maintenance not otherwise included in paragraphs (g)(2)(i)(A)(1), (2), or (3) of this section and not exempted from the definition of transport water in § 423.11(p), and when water volumes cannot be managed by installed spares, redundancies, maintenance tanks, and other secondary bottom ash system equipment.
- (ii) The total volume that may be discharged to a POTW for the above activities shall be reduced or eliminated to the extent achievable as determined by the control authority. The control authority may also include control measures (including best management practices) that are technologically available and economically achievable in light of best industry practice. In no event shall the total volume of the discharge exceed a 30-day rolling average of ten percent of the primary active wetted bottom ash system volume. The volume of daily discharges used to calculate the 30-day rolling average shall be calculated using measurements from flow monitors.
  - (iii) For bottom ash transport water generated by a low utilization electric generating unit, the quantity of pollutants discharged in bottom ash transport water shall incorporate the elements of a best management practices plan as described in § 423.13(k)(3).
- (h) **Flue gas mercury control wastewater.** For any electric generating unit with a total nameplate generating capacity of more than 50 megawatts and that is not an oil-fired unit, there shall be no discharge of pollutants in flue gas mercury control wastewater. This standard applies to the discharge of flue gas mercury control wastewater generated on and after November 1, 2018. Whenever flue gas mercury control wastewater is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge standard in this paragraph.
  - (i) **Gasification wastewater.** For any electric generating unit with a total nameplate generating capacity of more than 50 megawatts and that is not an oil-fired unit, the quantity of pollutants in gasification wastewater shall not exceed the quantity determined by multiplying the flow of gasification wastewater times the concentration listed in the table following this paragraph (i). Dischargers must meet the standards in this paragraph by November 1, 2018. These standards apply to the discharge of gasification wastewater generated on and after November 1, 2018.

Pollutant or pollutant property	PSES	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (µg/L)	4	
Mercury, total (ng/L)	1.8	1.3
Selenium, total (µg/L)	453	227
Total dissolved solids (mg/L)	38	22

[47 FR 52304, Nov. 19, 1982, as amended at 80 FR 67901, Nov. 3, 2015; 82 FR 43500, Sept. 18, 2017; 85 FR 64720, Oct. 13, 2020]

#### § 423.17 Pretreatment standards for new sources (PSNS).

- (a) **1982 PSNS.** Except as provided in 40 CFR 403.7, any new source as of October 14, 1980, subject to paragraph (a) of this section, which introduces pollutants into a publicly owned treatment works, must comply with 40 CFR part 403, the following pretreatment standards for new sources, and the PSES in § 423.16, established on November 3, 2015. In the case of conflict, the more stringent standards apply:

- (1) **PCBs.** There shall be no discharge of polychlorinated biphenyl compounds such as those used for transformer fluid.
- (2) **Chemical metal cleaning wastes.** The pollutants discharged in chemical metal cleaning wastes shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS
	Maximum for any 1 day (mg/L)
Copper, total	1.0

- (3) [Reserved]

(4)

- (i) **Cooling tower blowdown.** The pollutants discharged in cooling tower blowdown shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS
	Maximum for any time (mg/L)
The 126 priority pollutants (appendix A) contained in chemicals added for cooling tower maintenance, except:	( <sup>1</sup> )
Chromium, total	0.2
zinc, total	1.0

<sup>1</sup> No detectable amount.

- (ii) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the standards for the 126 priority pollutants in paragraph (a)(4)(i) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.
- (5) **Fly ash transport water.** There shall be no discharge of wastewater pollutants from fly ash transport water.
- (b) **2015 PSNS.** Except as provided in 40 CFR 403.7, any new source as of June 7, 2013, subject to this paragraph (b), which introduces pollutants into a publicly owned treatment works must comply with 40 CFR part 403 and the following pretreatment standards for new sources:
- (1) **PCBs.** There shall be no discharge of polychlorinated biphenyl compounds such as those used for transformer fluid.
- (2) **Chemical metal cleaning wastes.** The pollutants discharged in chemical metal cleaning wastes shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS
	Maximum for 1 day (mg/L)
Copper, total	1.0

- (3) [Reserved]

(4)

- (i) **Cooling tower blowdown.** The pollutants discharged in cooling tower blowdown shall not exceed the concentration listed in the following table:

Pollutant or pollutant property	PSNS
	Maximum for any time (mg/L)
The 126 priority pollutants (appendix A) contained in chemicals added for cooling tower maintenance, except:	( <sup>1</sup> )
Chromium, total	0.2
zinc, total	1.0

<sup>1</sup> No detectable amount.

- (ii) At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the standards for the 126 priority pollutants in paragraph (b)(4)(i) of this section may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR part 136.
- (5) **Fly ash transport water.** There shall be no discharge of pollutants in fly ash transport water. Whenever fly ash transport water is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge standard in this paragraph.
- (6) **FGD wastewater.** The quantity of pollutants discharged in FGD wastewater shall not exceed the quantity determined by multiplying the flow of FGD wastewater times the concentration listed in the following table:

Pollutant or pollutant property	PSNS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (µg/L)	4	
Mercury, total (ng/L)	39	24
Selenium, total (µg/L)	5	
TDS (mg/L)	50	24

- (7) **Flue gas mercury control wastewater.** There shall be no discharge of pollutants in flue gas mercury control wastewater. Whenever flue gas mercury control wastewater is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge standard in this paragraph.
- (8) **Bottom ash transport water.** There shall be no discharge of pollutants in bottom ash transport water. Whenever bottom ash transport water is used in any other plant process or is sent to a treatment system at the plant, the resulting effluent must comply with the discharge standard in this paragraph.
- (9) **Gasification wastewater.** The quantity of pollutants discharged in gasification wastewater shall not exceed the quantity determined by multiplying the flow of gasification wastewater times the concentration listed in the following table:

Pollutant or pollutant property	PSNS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (µg/L)	4	
Mercury, total (ng/L)	1.8	1.3
Selenium, total (µg/L)	453	227
Total dissolved solids (mg/L)	38	22

- (10) **Combustion residual leachate.** The quantity of pollutants discharged in combustion residual leachate shall not exceed the quantity determined by multiplying the flow of combustion residual leachate times the concentration listed in the following table:

Pollutant or pollutant property	PSNS	
	Maximum for any 1 day	Average of daily values for 30 consecutive days shall not exceed
Arsenic, total (µg/L)	11	8
Mercury, total (ng/L)	788	356

[80 FR 67902, Nov. 3, 2015]

#### § 423.18 Permit conditions.

All permits subject to this part shall include the following permit conditions:

- (a) An electric generating unit shall qualify as a low utilization electric generating unit or permanently ceasing the combustion of coal by December 31, 2028, if such qualification would have been demonstrated absent the following qualifying event:
  - (1) An emergency order issued by the Department of Energy under Section 202(c) of the Federal Power Act,
  - (2) A reliability must run agreement issued by a Public Utility Commission, or
  - (3) Any other reliability-related order or agreement issued by a competent electricity regulator (e.g., an independent system operator) which results in that electric generating unit operating in a way not contemplated when the certification was made; or
  - (4) The operation of the electric generating unit was necessary for load balancing in an area subject to a declaration under 42 U.S.C. 5121 *et seq.*, that there exists:
    - (i) An "Emergency," or
    - (ii) A "Major Disaster," and
    - (iii) That load balancing was due to the event that caused the "Emergency" or "Major Disaster" in paragraph (a)(4) of this section to be declared,
- (b) Any facility providing the required documentation pursuant to § 423.19(g) may avail itself of the protections of this permit condition.

[85 FR 64721, Oct. 13, 2020]

### § 423.19 Reporting and recordkeeping requirements.

- (a) Discharges subject to this part must comply with the following additional reporting requirements.
- (b) Signature and certification. Unless otherwise provided below, all certifications and recertifications required in this part must be signed and certified pursuant to 40 CFR 122.22 for direct dischargers or 40 CFR 403.12(l) for indirect dischargers.
- (c) Requirements for facilities discharging bottom ash transport water pursuant to § 423.13(k)(2)(i) or 423.16(g)(2)(i).
  - (1) Initial Certification Statement. For sources seeking to discharge bottom ash transport water pursuant to § 423.13(k)(2)(i) or 423.16(g)(2)(i), an initial certification shall be submitted to the permitting authority by the as soon as possible date determined under § 423.11(t), or the control authority by October 13, 2023 in the case of an indirect discharger.
  - (2) Signature and certification. The certification statement must be signed and certified by a professional engineer.
  - (3) Contents. An initial certification shall include the following:
    - (A) A statement that the professional engineer is a licensed professional engineer.
    - (B) A statement that the professional engineer is familiar with the regulation requirements.
    - (C) A statement that the professional engineer is familiar with the facility.
    - (D) The primary active wetted bottom ash system volume in § 423.11(aa).
    - (E) Material assumptions, information, and calculations used by the certifying professional engineer to determine the primary active wetted bottom ash system volume.
    - (F) A list of all potential discharges under § 423.13(k)(2)(i)(A)(1) through (4) or § 423.16(g)(2)(i)(A) through (D), the expected volume of each discharge, and the expected frequency of each discharge.
    - (G) Material assumptions, information, and calculations used by the certifying professional engineer to determine the expected volume and frequency of each discharge including a narrative discussion of why such water cannot be managed within the system and must be discharged.
    - (H) A list of all wastewater treatment systems at the facility currently, or otherwise required by a date certain under this section.
    - (I) A narrative discussion of each treatment system including the system type, design capacity, and current or expected operation.
- (d) Requirements for a bottom ash best management practices plan.
  - (1) **Initial and annual certification statement.** For sources required to develop and implement a best management practices plan pursuant to § 423.13(k)(3), an initial certification shall be made to the permitting authority with a permit application or within two years of October 13, 2021, whichever is later, or to the control authority no later than October 13, 2023 in the case of an indirect discharger, and an annual recertification shall be made to the permitting authority, or control authority in the case of an indirect discharger, within 60 days of the anniversary of the original plan.
  - (2) **Signature and certification.** The certification statement must be signed and certified by a professional engineer.
  - (3) **Contents for initial certification.** An initial certification shall include the following:
    - (A) A statement that the professional engineer is a licensed professional engineer.
    - (B) A statement that the professional engineer is familiar with the regulation requirements.
    - (C) A statement that the professional engineer is familiar with the facility.
    - (D) The best management practices plan.
    - (E) A statement that the best management practices plan is being implemented.
  - (4) **Additional contents for annual certification.** In addition to the required contents of the initial certification in paragraph (c)(3) of this section an annual certification shall include the following:

- (A) Any updates to the best management practices plan.
  - (B) An attachment of weekly flow measurements from the previous year.
  - (C) The average amount of recycled bottom ash transport water in gallons per day.
  - (D) Copies of inspection reports and a summary of preventative maintenance performed on the system.
  - (E) A statement that the plan and corresponding flow records are being maintained at the office of the plant.
- (e) Requirements for low utilization electric generating units.
- (1) **Notice of Planned Participation.** For sources seeking to qualify as a low utilization electric generating units, a Notice of Planned Participation shall be submitted to the permitting authority or control authority no later than October 13, 2021.
  - (2) **Contents.** A Notice of Planned Participation shall identify the potential low utilization electric generating unit. The notice shall also include a statement of at least two years' capacity utilization rating data for the most recent two years of operation of each low utilization electric generating unit and a statement that the facility has a good faith belief that each low utilization electric generating unit will continue to operate at the required capacity utilization rating. Where the most recent capacity utilization rating does not meet the low utilization electric generating unit requirement, a discussion of the projected future utilization shall be provided, including material data and assumptions used to make that projection.
  - (3) **Initial and annual certification statement.** For sources seeking to qualify as a low utilization electric generating unit under this part, an initial certification shall be made to the permitting authority, or to the control authority in the case of an indirect discharger, no later than December 31, 2023, and an annual recertification shall be made to the permitting authority, or control authority in the case of an indirect discharger, within 60 days of submitting annual electricity production data to the Energy Information Administration.
  - (4) **Contents.** A certification or annual recertification shall be based on the information submitted to the Energy Information Administration and shall include copies of the underlying forms submitted to the Energy Information Administration, as well as any supplemental information and calculations used to determine the two year average annual capacity utilization rating.
- (f) Requirements for units that will achieve permanent cessation of coal combustion by December 31, 2028.
- (1) **Notice of Planned Participation.** For sources seeking to qualify as an electric generating unit that will achieve permanent cessation of coal combustion by December 31, 2028, under this part, a Notice of Planned Participation shall be made to the permitting authority, or to the control authority in the case of an indirect discharger, no later than October 13, 2021.
  - (2) **Contents.** A Notice of Planned Participation shall identify the electric generating units intended to achieve the permanent cessation of coal combustion. A Notice of Planned Participation shall include the expected date that each electric generating unit is projected to achieve permanent cessation of coal combustion, whether each date represents a retirement or a fuel conversion, whether each retirement or fuel conversion has been approved by a regulatory body, and what the relevant regulatory body is. The Notice of Planned Participation shall also include a copy of the most recent integrated resource plan for which the applicable state agency approved the retirement or repowering of the unit subject to the ELGs, certification of electric generating unit cessation under 40 CFR 257.103(b), or other documentation supporting that the electric generating unit will permanently cease the combustion of coal by December 31, 2028. The Notice of Planned Participation shall also include, for each such electric generating unit, a timeline to achieve the permanent cessation of coal combustion. Each timeline shall include interim milestones and the projected dates of completion.
  - (3) **Annual Progress Report.** Annually after submission of the Notice of Planned Participation in paragraph (f)(1) of this section, a progress report shall be filed with the permitting authority, or control authority in the case of an indirect discharger.
  - (4) **Contents.** An Annual Progress Report shall detail the completion of any interim milestones listed in the Notice of Planned Participation since the previous progress report, provide a narrative discussion of any completed, missed, or delayed milestones, and provide updated milestones.
- (g) Requirements for facilities seeking the protections of § 423.18.
- (1) **Certification statement.** For sources seeking to apply the protections of the permit conditions in paragraph § 423.18, and for each instance that § 423.18 is applied, a one-time certification shall be submitted to the permitting authority, or control authority in the case of an indirect discharger, no later than:

- (A) In the case of an order or agreement under § 423.18(a)(1), 30 days from receipt of the order or agreement attached pursuant to paragraph (g)(2)(B) of this section; or
- (B) In the case of an "Emergency" or "Major Disaster" under § 423.18(a)(2), 30 days from the date that a load balancing need arose.
- (2) **Contents.** A certification statement must include the following:
  - (A) The qualifying event from the list in § 423.18(a), the individual or entity that issued or triggered the event, and the date that such an event was issued or triggered.
  - (B) A copy of any documentation of the qualifying event from the individual or entity listed under paragraph (g)(2)(A) of this section, or, where such documentation does not exist, other documentation with indicia of reliability for the permitting authority to confirm the qualifying event.
  - (C) An analysis and accompanying narrative discussion which demonstrates that a electric generating unit would have qualified for the subcategory at issue absent the event detailed in paragraph (g)(2)(A), including the material data, assumptions, and methods used.
- (3) **Termination of need statement.** For sources filing a certification statement under paragraph (g)(1) above, and for each such certification statement, a one-time termination of need statement shall be submitted to the permitting authority, or control authority in the case of an indirect discharger, no later than 30 days from when the source is no longer subject to increased production from the qualifying event.
- (4) **Contents.** A termination of need statement must include a narrative discussion including the date the qualifying event terminated, or if it has not terminated, why the source believes the capacity utilization will no longer be elevated to a level requiring the protection of § 423.18.
- (h) Requirements for facilities voluntarily meeting the limits in 423.13(g)(3)(i).
  - (1) **Notice of Planned Participation.** For sources opting to comply with the Voluntary Incentives Program requirements of section 423.13(g)(3)(i) by December 31, 2028, a Notice of Planned Participation shall be made to the permitting authority no later than October 13, 2021.
  - (2) **Contents.** A Notice of Planned Participation shall identify the facility opting to comply with the Voluntary Incentives Program requirements of 423.13(g)(3)(i), specify what technology or technologies are projected to be used to comply with those requirements, and provide a detailed engineering dependency chart and accompanying narrative demonstrating when and how the system(s) and any accompanying disposal requirements will be achieved by December 31, 2028.
  - (3) **Annual progress report.** After submission of the Notice of Planned Participation in paragraph (h)(1), a progress report shall be filed with the permitting authority, or control authority in the case of an indirect discharger.
  - (4) **Contents.** An Annual Progress Report shall detail the completion of interim milestones presented in the engineering dependency chart from the Notice of Planned Participation since the previous progress report, provide a narrative discussion of completed, missed, or delayed milestones, and provide updated milestones.
  - (5) **Rollover certification.** Where, prior to the effective date, a discharger has already provided a notice to the permitting authority of opting to comply with the Voluntary Incentives Program requirements of § 423.13(g)(i), such notice will satisfy paragraph (h)(1) of this section. However, where details required by (h)(2) of this section were missing from the previously provided notice, those details must be provided in the first Annual Progress Report, no later than October 13, 2021.
- (i) Requirements for facilities seeking to transfer between applicable limitations in a permit under § 423.13(o).
  - (1) **Notice of Planned Participation.** For sources which have filed a Notice of Planned Participation under paragraphs (e)(1), (f)(1), or (h)(1) of this section and intend to make changes that would qualify them for a different set of requirements under § 423.13(o), a Notice of Planned Participation shall be made to the permitting authority, or to the control authority in the case of an indirect discharger, no later than the dates stated in § 423.13(o)(1).
  - (2) **Contents.** A Notice of Planned Participation shall include a list of the electric generating units for which the source intends to change compliance alternatives. For each such electric generating unit, the notice shall list the specific provision under which this transfer will occur, the reason such a transfer is warranted, and a narrative discussion demonstrating that each electric generating unit will be able to maintain compliance with the relevant provisions.
- (j) **Notice of material delay.**



- (1) **Notice.** Within 30 days of experiencing a material delay in the milestones set forth in paragraphs (f)(2) or (h)(2) of this section and where such a delay may preclude permanent cessation of coal combustion or compliance with the voluntary incentives program limitations by December 31, 2028, a facility shall file a notice of material delay with the permitting authority, or control authority in the case of an indirect discharger.
- (2) **Contents.** The contents of such a notice shall include the reason for the delay, the projected length of the delay, and a proposed resolution to maintain compliance.

[85 FR 64721, Oct. 13, 2020]

## Appendix A to Part 423 - 126 Priority Pollutants

001 Acenaphthene

002 Acrolein

003 Acrylonitrile

004 Benzene

005 Benzidine

006 Carbon tetrachloride (tetrachloromethane)

007 Chlorobenzene

008 1,2,4-trichlorobenzene

009 Hexachlorobenzene

010 1,2-dichloroethane

011 1,1,1-trichloroethane

012 Hexachloroethane

013 1,1-dichloroethane

014 1,1,2-trichloroethane

015 1,1,2,2-tetrachloroethane

016 Chloroethane

018 Bis(2-chloroethyl) ether

019 2-chloroethyl vinyl ether (mixed)

020 2-chloronaphthalene

021 2,4, 6-trichlorophenol

022 Parachlorometa cresol

023 Chloroform (trichloromethane)

024 2-chlorophenol

025 1,2-dichlorobenzene

026 1,3-dichlorobenzene

027 1,4-dichlorobenzene

028 3,3-dichlorobenzidine

029 1,1-dichloroethylene

030 1,2-trans-dichloroethylene

031 2,4-dichlorophenol

032 1,2-dichloropropane

033 1,2-dichloropropylene (1,3-dichloropropene)

034 2,4-dimethylphenol

035 2,4-dinitrotoluene

036 2,6-dinitrotoluene

037 1,2-diphenylhydrazine

038 Ethylbenzene

039 Fluoranthene

040 4-chlorophenyl phenyl ether

041 4-bromophenyl phenyl ether

042 Bis(2-chloroisopropyl) ether

043 Bis(2-chloroethoxy) methane

044 Methylene chloride (dichloromethane)

045 Methyl chloride (dichloromethane)

046 Methyl bromide (bromomethane)

047 Bromoform (tribromomethane)

048 Dichlorobromomethane

051 Chlorodibromomethane

052 Hexachlorobutadiene

053 Hexachloromyclopentadiene

054 Isophorone

055 Naphthalene

056 Nitrobenzene

057 2-nitrophenol

058 4-nitrophenol

059 2,4-dinitrophenol

060 4,6-dinitro-o-cresol

061 N-nitrosodimethylamine

062 N-nitrosodiphenylamine

063 N-nitrosodi-n-propylamin

064 Pentachlorophenol

065 Phenol

066 Bis(2-ethylhexyl) phthalate

067 Butyl benzyl phthalate

068 Di-N-Butyl Phthalate

069 Di-n-octyl phthalate

070 Diethyl Phthalate

071 Dimethyl phthalate

072 1,2-benzanthracene (benzo(a) anthracene

073 Benzo(a)pyrene (3,4-benzo-pyrene)

074 3,4-Benzofluoranthene (benzo(b) fluoranthene)

075 11,12-benzofluoranthene (benzo(b) fluoranthene)

076 Chrysene

077 Acenaphthylene

078 Anthracene

079 1,12-benzoperylene (benzo(ghi) perylene)

080 Fluorene

081 Phenanthrene

082 1,2,5,6-dibenzanthracene (dibenzo(h) anthracene)

083 Indeno (1,2,3-cd) pyrene (2,3-o-pheynylene pyrene)

084 Pyrene

085 Tetrachloroethylene

086 Toluene

087 Trichloroethylene

088 Vinyl chloride (chloroethylene)

089 Aldrin

090 Dieldrin

091 Chlordane (technical mixture and metabolites)

092 4,4-DDT

093 4,4-DDE (p,p-DDX)

094 4,4-DDD (p,p-TDE)

095 Alpha-endosulfan

096 Beta-endosulfan

097 Endosulfan sulfate

098 Endrin

099 Endrin aldehyde

100 Heptachlor

101 Heptachlor epoxide (BHC-hexachlorocyclohexane)

102 Alpha-BHC

103 Beta-BHC

104 Gamma-BHC (lindane)

105 Delta-BHC (PCB-polychlorinated biphenyls)

106 PCB-1242 (Arochlor 1242)

107 PCB-1254 (Arochlor 1254)

108 PCB-1221 (Arochlor 1221)

109 PCB-1232 (Arochlor 1232)

110 PCB-1248 (Arochlor 1248)

111 PCB-1260 (Arochlor 1260)

112 PCB-1016 (Arochlor 1016)

113 Toxaphene

114 Antimony

115 Arsenic

116 Asbestos

117 Beryllium

118 Cadmium

119 Chromium

120 Copper

121 Cyanide, Total

122 Lead

123 Mercury

124 Nickel

125 Selenium

126 Silver

127 Thallium

126 Silver

128 Zinc

129 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD)