

§ 430.02

40 CFR Ch. I (7-1-03 Edition)

moisture content). Market pulp shall be measured in air-dry tons (10% moisture). Production shall be determined for each mill based upon past production practices, present trends, or committed growth.

(2) For AOX and chloroform limitations and standards specified in subparts B and E of this part: Production shall be defined as the annual unbleached pulp production entering the first stage of the bleach plant divided by the number of operating days during that year. Unbleached pulp production shall be measured in air-dried-metric tons (10% moisture) of brownstock pulp entering the bleach plant at the stage during which chlorine or chlorine-containing compounds are first applied to the pulp. In the case of bleach plants that use totally chlorine free bleaching processes, unbleached pulp production shall be measured in air-dried-metric tons (10% moisture) of brownstock pulp entering the first stage of the bleach plant from which wastewater is discharged. Production shall be determined for each mill based upon past production practices, present trends, or committed growth.

(o) *TCDD*. 2,3,7,8-tetrachlorodibenzop-dioxin.

(p) *TCDF*. 2,3,7,8-tetrachlorodibenzofuran.

(q) *Totally chlorine-free (TCF) bleaching*. Pulp bleaching operations that are performed without the use of chlorine,

sodium hypochlorite, calcium hypochlorite, chlorine dioxide, chlorine monoxide, or any other chlorine-containing compound.

(r) *Wet Barking*. Wet barking operations shall be defined to include hydraulic barking operations and wet drum barking operations which are those drum barking operations that use substantial quantities of water in either water sprays in the barking drums or in a partial submersion of the drums in a "tub" of water.

[63 FR 18635, Apr. 15, 1998; 63 FR 42239, Aug. 7, 1998]

§ 430.02 Monitoring requirements.

This section establishes minimum monitoring frequencies for certain pollutants. Where no monitoring frequency is specified in this section or where the duration of the minimum monitoring frequency has expired under paragraphs (b) through (e) of this section, the permit writer or pretreatment control authority shall determine the appropriate monitoring frequency in accordance with 40 CFR 122.44(i) or 40 CFR part 403, as applicable.

(a) *BAT, NSPS, PSES, and PSNS monitoring frequency for chlorinated organic pollutants*. The following monitoring frequencies apply to discharges subject to subpart B or subpart E of this part:

CAS number	Pollutant	Minimum monitoring frequency	
		Non-TCF ^a	TCF ^b
1198556	Tetrachlorocatechol	Monthly	(c)
2539175	Tetrachloroguaiacol	Monthly	(c)
2539266	Trichlorosyringol	Monthly	(c)
2668248	4,5,6-trichloroguaiacol	Monthly	(c)
32139723	3,4,6-trichlorocatechol	Monthly	(c)
56961207	3,4,5-trichlorocatechol	Monthly	(c)
57057837	3,4,5-trichloroguaiacol	Monthly	(c)
58902	2,3,4,6-tetrachlorophenol	Monthly	(c)
60712449	3,4,6-trichloroguaiacol	Monthly	(c)
87865	Pentachlorophenol ^d	Monthly	(c)
88062	2,4,6-trichlorophenol ^d	Monthly	(c)
95954	2,4,5-trichlorophenol ^d	Monthly	(c)
1746016	2,3,7,8-TCDD	Monthly	(c)
51207319	2,3,7,8-TCDF	Monthly	(c)
67663	chloroform ^e	Weekly	(c)
59473040	AOX ^f	Daily	None specified.

^aNon-TCF: Pertains to any fiber line that does not use exclusively TCF bleaching processes.

^bTCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22 or, for indirect dischargers, as reported to the pretreatment control authority under 40 CFR 403.12 (b), (d), or (e).

^cThis regulation does not specify a limit for this pollutant for TCF bleaching processes.

^dMonitoring frequency does not apply to this compound when used as a biocide. The permitting or pretreatment control authority must determine the appropriate monitoring frequency for this compound, when used as a biocide, under 40 CFR 122.44(i) or 40 CFR part 403, as applicable.

^eThis regulation does not specify a limit for this pollutant for Subpart E mills.

Environmental Protection Agency

§ 430.02

^fThis regulation does not specify a limit for this pollutant for the ammonium-based or specialty grade sulfite pulp segments of Subpart E.

(b) *Duration of required monitoring for BAT, NSPS, PSES, and PSNS.* The monitoring frequencies specified in paragraph (a) of this section apply for the following time periods:

(1) For direct dischargers, a duration of 5 years commencing on the date the applicable limitations or standards from subpart B or subpart E of this part are first included in the discharger's NPDES permit;

(2) For existing indirect dischargers, until April 17, 2006;

(3) For new indirect dischargers, a duration of 5 years commencing on the

date the indirect discharger commences operation.

(c) *Reduced monitoring frequencies for bleach plant pollutants under the Voluntary Advanced Technology Incentives Program.* The following monitoring frequencies apply to mills enrolled in the Voluntary Advanced Technology Incentives Program established under subpart B of this part for a duration of 5 years commencing after achievement of the applicable BAT limitations specified in § 430.24(b)(3) or NSPS specified in § 430.25(c)(1) for the following pollutants, except as noted in footnote f:

CAS number	Pollutant	Minimum monitoring frequency		
		Non-ECF ^a	Advanced ECF ^{b,f}	TCF ^c
1198556	Tetrachlorocatechol	Monthly	Monthly	(d)
2539175	Tetrachloroguaiacol	Monthly	Monthly	(d)
2539266	Trichlorosyringol	Monthly	Monthly	(d)
2668248	4,5,6-trichloroguaiacol	Monthly	Monthly	(d)
32139723	3,4,6-trichlorocatechol	Monthly	Monthly	(d)
56961207	3,4,5-trichlorocatechol	Monthly	Monthly	(d)
57057837	3,4,5-trichloroguaiacol	Monthly	Monthly	(d)
58902	2,3,4,6-tetrachlorophenol	Monthly	Monthly	(d)
60712449	3,4,6-trichloroguaiacol	Monthly	Monthly	(d)
87865	Pentachlorophenol ^e	Monthly	Monthly	(d)
88062	2,4,6-trichlorophenol ^e	Monthly	Monthly	(d)
95954	2,4,5-trichlorophenol ^e	Monthly	Monthly	(d)
1746016	2,3,7,8-TCDD	Monthly	Monthly	(d)
51207319	2,3,7,8-TCDF	Monthly	Monthly	(d)
67663	Chloroform	Weekly	Monthly	(d)

^aNon-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.

^bAdvanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes, or exclusively ECF and TCF bleaching processes as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).

^cTCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

^dThis regulation does not specify a limit for this pollutant for TCF bleaching processes.

^eMonitoring frequency does not apply to this compound when used as a biocide. The permitting authority must determine the appropriate monitoring frequency for this compound, when used as a biocide, under 40 CFR 122.44(i).

^fMonitoring requirements for these pollutants by mills certifying as Advanced ECF in their NPDES permit application or other communication to the permitting authority will be suspended after one year of monitoring. The permitting authority must determine the appropriate monitoring frequency for these pollutants beyond that time under 40 CFR 122.44(i).

(d) *Reduced monitoring frequencies for AOX under the Voluntary Advanced Technology Incentives Program (year one).* The following monitoring frequencies apply to direct dischargers enrolled in the Voluntary Advanced

Technology Incentives Program established under Subpart B of this part for a duration of one year after achievement of the applicable BAT limitations specified in § 430.24(b)(4)(i) or NSPS specified in § 430.25(c)(2):

CAS number	Pollutant	Non-ECF, any tier ^a	Advanced ECF, any tier ^b	TCF, any tier ^c
59473040	AOX	Daily	Weekly	None specified.

^aNon-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.

^bAdvanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes or exclusively ECF and TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).

^c TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

(e) *Reduced monitoring frequencies for AOX under the Voluntary Advanced Technology Incentives Program (years two through five).* The following monitoring frequencies apply to mills enrolled in the Voluntary Advanced Technology Incentives Program estab-

lished under Subpart B of this part for a duration of four years starting one year after achievement of the applicable BAT limitations specified in § 430.24(b)(4)(i) or NSPS specified in § 430.25(c)(2):

CAS number	Pollutant	Non-ECF any tier ^a	Advanced ECF—tier I ^b	Advanced ECF—tier II ^b	Advanced ECF—tier III ^b	TCF—any tier ^c
59473040	AOX	Daily	Monthly	Quarterly	Annually	None specified.

^a Non-ECF: Pertains to any fiber line that does not use exclusively ECF or TCF bleaching processes.
^b Advanced ECF: Pertains to any fiber line that uses exclusively Advanced ECF bleaching processes or exclusively ECF and TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22. Advanced ECF consists of the use of extended delignification or other technologies that achieve at least the Tier I performance levels specified in § 430.24(b)(4)(i).
^c TCF: Pertains to any fiber line that uses exclusively TCF bleaching processes, as disclosed by the discharger in its permit application under 40 CFR 122.21(g)(3) and certified under 40 CFR 122.22.

(f) *Certification in Lieu of Monitoring for Chloroform.* (1) *Under what circumstances may a discharger be exempt from the minimum monitoring requirements of this section for chloroform?* A discharger subject to limitations or standards for chloroform under subpart B of this part is not subject to the minimum monitoring requirements specified in this section for chloroform at a fiber line to which the limitations or standards apply if the discharger meets the requirements of this section.

(2) *How do I qualify for the exemption?* At the time you request an exemption from the minimum monitoring requirements of this section for chloroform from your permitting authority or pretreatment control authority for a fiber line, you must:

(i) Demonstrate, based on 104 measurements taken over a period of not less than two years of monitoring conducted in accordance with paragraph (a) of this section, that you are complying with the applicable limitations or standards for chloroform;

(ii) Certify that you will maintain a record of the maximum value for each of the following process and operating conditions for the fiber line that was recorded during the collection of each of the samples used to make the demonstration required under paragraph (f)(2)(i) of this section.

(A) The pH of the first chlorine dioxide bleaching stage;

(B) The chlorine (Cl₂) content of chlorine dioxide (ClO₂) used on the bleach line;

(C) The kappa factor of the first chlorine dioxide bleaching stage; and

(D) The total bleach line chlorine dioxide application rate;

(iii) Identify the chlorine-containing compound used for bleaching during the collection of samples used to make the demonstration required under paragraph (f)(2)(i) of this section; and

(iv) Certify that the fiber line does not use either elemental chlorine or hypochlorite as bleaching agents.

(3) *What happens if I change the process and operating conditions on the fiber line so that one or more exceeds the maximum value recorded under paragraph (f)(2)(ii) of this section for that process and operating condition?* If you wish to continue your exemption from the minimum monitoring requirements of this section for chloroform, you must:

(i) Demonstrate, based on monitoring conducted at a frequency similar to that required in paragraph (a) of this section and for a duration determined by the permitting or pretreatment control authority, that you are complying with the applicable limitations or standards for chloroform;

(ii) Certify that you will maintain a record of the maximum value for each of the following process and operating conditions for the fiber line that was recorded during the collection of each

of the samples used to make the demonstration required under paragraph (f)(6)(i) of this section:

(A) The pH of the first chlorine dioxide bleaching stage;

(B) The chlorine (Cl₂) content of chlorine dioxide (ClO₂) used on the bleach line;

(C) The kappa factor of the first chlorine dioxide bleaching stage; and

(D) The total bleach line chlorine dioxide application rate;

(iii) Identify the chlorine-containing compound used for bleaching during the collection of each sample used to make the demonstration required under paragraph (f)(3)(i) of this section; and

(iv) Certify that the fiber line does not use either elemental chlorine or hypochlorite as bleaching agents.

(4) *What are my reporting obligations?* You must certify in reports required under § 122.41(l)(4) or § 403.12(b) of this chapter, as appropriate, that the chlorine-containing compounds used for bleaching are unchanged from those identified under paragraph (f)(2)(iii) of this section and that the following process and operating conditions maintained on the fiber line during the reporting period have not exceeded the maximum value recorded for each such condition during the collection of the samples used to make the demonstration required under paragraphs (f)(2)(i) or (f)(3)(i) of this section:

(i) The pH of the first chlorine dioxide bleaching stage;

(ii) The chlorine (Cl₂) content of chlorine dioxide (ClO₂) used on the bleach line;

(iii) The kappa factor of the first chlorine dioxide bleaching stage; and

(iv) The total bleach line chlorine dioxide application rate.

(5) *What happens if I fail to maintain the records described in paragraphs (f)(2)(ii) and (f)(3)(ii) of this section?* You will be required to comply with the minimum monitoring requirements of this section for chloroform.

(6) *What happens if I exceed the maximum value recorded under paragraphs (f)(2)(ii) or (f)(3)(ii) of this section for any of the process and operating conditions identified in that section?*

(i) If for any reason (e.g., intentionally or due to process upset) you

fail to maintain process and operating conditions at values equal to or less than the maximum value recorded under paragraphs (f)(2)(ii) or (f)(3)(ii) of this section for each such condition, you will be in violation of the applicable chloroform limitation or standard unless:

(A) Within 30 days, you notify your permitting or pretreatment control authority in writing of the exceedance; and

(B) You demonstrate compliance with the applicable chloroform limitation or standard by immediately monitoring the bleach plant effluent for chloroform at a frequency similar to that required in paragraph (a) of this section and for a duration determined by the permit or pretreatment control authority.

(ii) In order to continue your exemption from the minimum monitoring requirements of this section for chloroform, you must meet the requirements of paragraph (f)(6)(i) of this section and you must recertify that the fiber line process and operating conditions do not exceed the maximum value recorded under paragraphs (f)(2)(ii) or (f)(3)(ii) of this section for each of the parameters identified in those paragraphs.

(7) *Definitions:*

(i) *Kappa factor*—the ratio of available chlorine (total equivalent chlorine, as percent on oven dry pulp) to the kappa number of the pulp. Kappa number is the lignin content of pulp, as measured by a modified permanganate test corrected to 50 percent consumption of the chemical.

(ii) *Total bleach line chlorine dioxide application rate*—mass of chlorine dioxide applied in all stages of the bleach line per mass of unbleached pulp (i.e., lb/ton or kg/kkg).

(iii) *Chlorine-containing compounds*—compounds containing chlorine used in the bleach plant for bleaching, brightening, whitening, or viscosity control. These compounds include but are not limited to chlorine (Cl₂), sodium hypochlorite (NaOCl), chlorine dioxide (ClO₂) and chlorine monoxide (Cl₂O).

[63 FR 18635, Apr. 15, 1998, as amended at 67 FR 58997, Sept. 19, 2002]